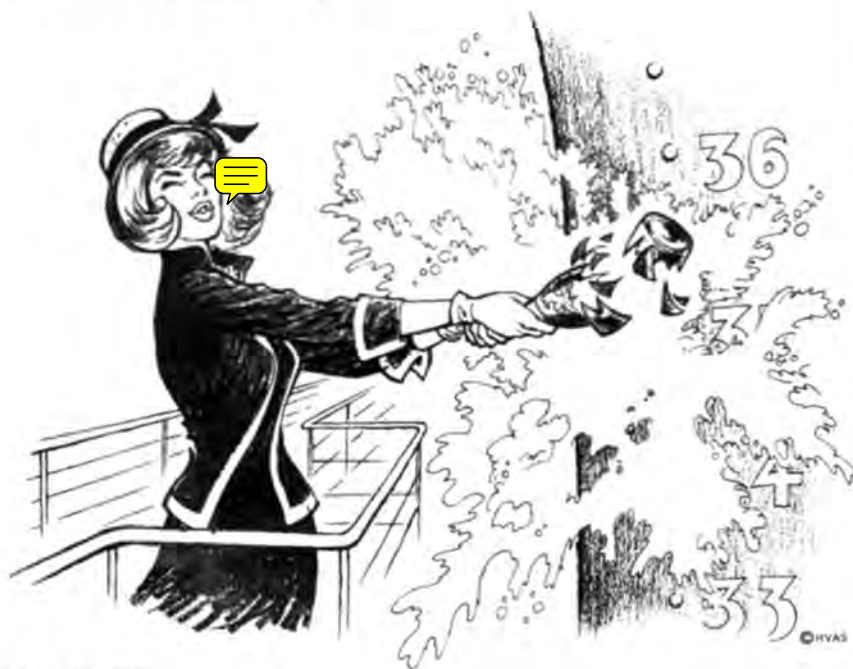


VOLUME 1., NO. 1

SPARKS - JOURNAL - QUARTERLY

SPRING EDITION - 1977

Launching



THE NEW

SPARKS JOURNAL QUARTERLY

W-h-e-e-e...

goes the whistle of the speaking-tube to the bridge. How many of you remember the whistle blowing, with a reminder from Second Mate "Pete" that he wants a time tick?

So we tune in "NAA", "NSS", NPG, or any of a hundred more stations - and dutifully at 12:00 Sharp, give him a return blast so he can check the ship's chronometer. Ahsol

Many members have indicated that they would enjoy hearing from the Society at periodic intervals. We have on several occasions furnished Newsletters to our members including one mailed in May of 1976. However, we would like to mail them at more frequent intervals, so have decided to put out a 'Quarterly' publication which we call "SPARKS JOURNAL QUARTERLY".

The Newspaper format, and with a quarterly schedule, we hope to be able to obtain a "Second Class" mailing permit from the Post Office. This should reduce, to a material degree the cost of mailing.

By having a printed permit on our mailing label (section) it should also reduce the need for hours of processing time formerly required to get the publication out.

We have already worked up a new Master Address System which will allow us to address this type of mailing with a minimum of time since it follows the "ZIP" code in the United States. Since publications mailed to foreign addresses will have to be enveloped anyway, it will not make too much difference.

(Please turn to Page 4)

RECORDING OUR HERITAGE



Publication of our new "SPARKS JOURNAL QUARTERLY" provides a timely opportunity for reviewing the Objectives established for our Society when it was founded, and for evaluating the effectiveness of our programs in the venue of membership acceptance and the scrutiny of time.

When our Society was founded some eight years ago, it was with the idea of bringing together those of us who saw service as wireless/radio-telegraphers in a professional capacity during some period of our lives. We thought, initially, that perhaps our effort might reach or recruit two or three hundred of our old shipmate friends - at least those in our area.

The passage of time has of course changed some of our original concepts and tenets. Our current membership is over ten times that which we originally anticipated. The appeal has exceeded our expectations (to put it mildly). Membership continues to grow largely by word-of-mouth by members themselves. The trust placed in the Society by our loyal members is priceless and an intangible that must be carefully preserved. The President and I am sure all officers of the Society are actually aware of our responsibilities and would like to assure (if any is needed) that we will continue to safeguard and promote the welfare of the Society to the best of our ability.

(Continued on Page 8, Col. 1)





SPARKS JOURNAL QUARTERLY

Published quarterly for our professional members with issues scheduled for Spring, Summer, Fall and Winter by the Society of Wireless Pioneers, Inc a non-profit organization chartered as such under the laws of the State of Calif. Copies are furnished sustaining members of the Society who pay for same through dues. A limited number of publications are mailed without cost to selected Technical Institutions, Colleges, Universities, Libraries, Museums and National Archives that have requested copies for reference or educational purposes.

MAILING ADDRESS: P.O. Box 530, Santa Rosa, CA 95402. Direct all inquiries and correspondence including 'change of address' for expeditious attention and handling.
EDITORIAL & OFFICE: 3366/15 Mendocino Ave. Santa Rosa, CA 95402 USA. Editor and Executive Director, Wm A. Breniman. Phone: 707/542-0898.

The Society does not solicit or accept subscriptions or advertisements for its publications from the public.

Every effort is made to assure the validity and authenticity of material published herein; However, the Society and its officers assume no responsibility for error. Manuscripts and articles published, express the opinion and views of the author and do not necessarily agree with those of the Society or its officers.

Application has been made to mail "SPARKS JOURNAL QUARTERLY" at Second-class postage rates and it is pending at Santa Rosa, CA. 95402.

We will try to take reasonable care with pictures, ms. etc. (and like material) received. However, the Society and its officers will not accept responsibility for any loss of such material. Those requesting return of such material or make inquiry should include S.A.S.E. to cover.



1977-78

PRESIDENT

William A. Breniman

VICE PRESIDENTS

Judge James Harvey Brown - Senior
Eben K. Cady - Finance & Audits
John N. Elwood - Membership
William C. Willmot - Chapters, P&R
Col. Manuel Fernandez - Awards.

SECRETARY

Prof. Herbert J. Scott

TREASURER

Lorin G. De Merritt

DIRECTORS

Arthur W. Filtness	Vancouver, B.C.
Dexter S. Bartless	Portland, Oregon
Ernst F. Wilmshurst	Fullbrook, Calif.
Ralph C. Folkman	Cleveland, Ohio
Col. Allen Bamabei	Silver Springs, Mo.
Earl W. Korf	Lincroft, N.J.
Gerald A. Whittaker	Santa Rosa, Calif.

AREA LIAISON & COORDINATION STAFF

Arthur W. Filtness	Canada
Cornelis Glerum	Northern Europe
Edwin G. Raser	N.E. USA
Ero Erickson	Great Lakes (USA)
Wm J. O'Brien	Australia, So.Pac.
Dady S. Major	India, SW Asia
Karl H.W. Baarslag	S.E. USA
Harry A. Maclaren	Gulf Coast
John A. Edwards	England
Jose Contreras R.	So. America
Joseph Falbo	Ariz. SW USA
V.H. "Eby" Conradt-Eberlin	Pacific N.W.

CHIEF OPERATOR

Oscar T. Harrison W5QKU, Spring, Texas

SOLILOQUY

(Inspired by reading the SOWP Records)

Now we discover that back through the years, we crossed each other's wake innumerable times, out on the deep blue, heading for distant shores, perhaps across the Gulf, maybe threading our way through the inside passage in dense fog, risking perilous rocks, - around the stormy Cape, up the coast, down the shore, through the canal, up the river, shivering past glaciers and bergs, sweating it out in fetid tropics, bracing the roaring hurricanes, staggered by tilting decks, frustrated by atmospherics released throughout the Heavens by demons from Hell. Sometimes we enjoyed caviar and champagne, and sometimes our stomachs rebelled at rotted chow unfit for swine. There were times when we could relax in dungarees, and times when we were expected to maintain the dignity of spic and span uniforms trimmed with gold.

We took our chances aboard whatever craft was handed us. Did this one turn out to be a vermin-infested, decrepit lugger? Better luck next time, when we would find opportunity to sail aboard a luxury liner. We rode the tankers, the banana boats, the tramps. We survived combat aboard ships of the Navy, aboard supply ships in convoy through war zones, where we became sitting ducks for the torpedo of a lurking submarine. Sometimes we were powered by paddlewheels with beam engines, more often by up-and-down engines and propeller, and betimes we raced along to break records with high-pressure turbines. There are those of us who went to sea in spectacular wind-jammers, and many who set out in sorry hulks so unseaworthy that they couldn't make it, and we were called upon to surmount assistance. Many of us, thank God, were among the lucky few who survived. Alas, there were those of us who disappeared. As with any Sailor, risk was our business. That's what we were paid for, - a handsome \$30 per month, with found.

For respite, we were assigned to such "attractive" duty as a lonely tropical isle or an isolated outpost in the frozen Northland. Before long, we were happy to go back to sea aboard another ship - ANY ship. We were expected to understand and capably manipulate the weird and wonderful creations of such legendary wizards as Hertz, Tesla, Marconi, De Forest, Poulsen, Fleming, Pickard, Bellini, Tosi, Kolster, Alexanderson, Fessenden, Armstrong, Hazletine, Slaby, Arco, Schoemaker, Kilbourne, Clark, Lowenstein and a host of others in an endless list. What's more, when these notables became involved in a quarrel over patents, rights and domain, we were expected to comply with the latest restrictions and avoid infringement - but maintain efficient communication; which we did by bootlegging verboten facilities which we smuggled aboard ship and kept discreetly concealed from the prying eyes of sleuths sent by the opposition. Did we break the law? It seems that we were expected to do so, by our superiors.

Did we work right past the "nearest shore station" of our competition to reach a distant station of our own organization? Did we thus violate International Regulations? Where was our ship at the moment? Could the violation alleged be proved? There were technicalities to be surmounted, obstacles to be circumvented. Somehow we managed and kept out of jail. There were hardships to be endured, emergencies to be met. When the chips were down, the last ones off were usually Sparks and the Skipper. That was one step better than getting your name on the monument. Today the Old Timers meet to swap fantastic tales, which the uninitiated and the Johnny-come-Latelies find unbelievable. But the pioneers well remember the names, the dates, the places, and know the stories are true. The money wasn't - much, but the other compensations were many. The experiences were priceless. Who, from some other calling, can match them? The storehouse of memory treasures is something no money could buy!

--Cdr. E. J. Quinby



INDEX

Historical Interest Features

1. LAUNCHING THE NEW SPARKS JOURNAL QUARTERLY
1. RECORDING OUR HERITAGE
2. THE WIRELESS PIONEERS, WHO ARE THEY?
3. FROM THE MAIL BUOY
4. GREAT SHIPS OF OUR CENTURY, SS NORMANDIE-FNSK
5. A WIRELESS DETECTIVE IN REAL LIFE
6. RADIO NMR
7. MARCONI AND THE ELETTRA
8. POLDHU, A SENTIMENTAL JOURNEY
9. THE RE-BIRTH OF KPH - 1920
11. SOWP NETS & SCHEDULES
12. LETTERS FROM MEMBERS
13. CALL IT 'WIRELESS', "HAIG'S PAGE"
14. NEW MEMBERS
16. EARLY DAYS ON THE LAKES
16. A BRIEF HISTORY, ROYAL CANADIAN CORPS OF SIGNALS
17. THE KILBOURNE & CLARK MANUFACTURING CO.
18. DER SLOPPEN CHEST, ALL YOU NEED IS MONEY
19. IN THE WAKE, MEMORIES OF DAYS LONG AGO
20. SOWP CHAPTERS
20. LOOKING BACK



"BEG PARDON, SIR, WOULD YOU KINDLY STOP YOUR SON FROM RUNNING AROUND THE SHIP...USING HIS 'CB' RADIO? HE COMES IN LOUD AND CLEAR IN THE VESSEL'S RADIO SHACK."

THE WIRELESS PIONEERS . . .

WHO ARE THEY ?

Members of the SOCIETY OF WIRELESS PIONEERS are or have been professional "Brass Pounders" at some period of their lives. They may have worked at commercial or government stations aboard ship, on land or in the air. Many served in the military, including the Navy and Signal Corps. Others have worked for various organizations with C. W. systems. Many have worked for Government-State, Provincial, Territorial, Federal, Etc. Some have held down assignments on high-speed circuits requiring a high degree of skill and operating ability.

Among our members, picked at random, are those who have served in the following assignments: Bristol Bay Alaska aboard salmon fishing boats or at land stations; in the oil fields of Venezuela and Bolivia (CPC) handling company traffic; Canadian Coastal Stations of British Columbia; Fishery protection in Russian Arctic waters; Coal burning mine sweepers; Aboard the British Battleship "ROYAL SOVEREIGN" with Lord Lewis Mountbatten; Presidential assignments with Pres. Eisenhower and Kennedy; Ten years with Press Wireless; Land stations in Bermuda, Falkland Island, Curacao and Eastern Canada; Served on over 25 Great Lake ships; Flew with TWA as Radio-Operator until CW discontinued in 1954; Served on 48 Australian and N. Z. ships and stations; Immigration and Border Patrol station.

Halifax Naval Wireless; Coast and Geodetic Survey ship in Alaska and Hawaii; Aboard ship captured by Japanese 1941; With Adm. Robley D. ("Fighting Bob") Evans aboard USS Connecticut 1908; Flew PANAM 1932-1947; Opened Mackay Station "WMR" at West Palm Beach, Fla. Apr. 1930; Assigned ships bound for Viet Nam last 6 years; Made first clipper ship flights across the Pacific with Panam; In convoy during WW2 bound for Bear Island

from Reykjavik Iceland-Germans located us and sank 34 out of 36 ships in few hours; Served in Ferry Command between Goose Bay or Gander to Prestwick; Relief operator on ferry between Kelsey Bay and Prince Rupert; Tuna clipper off Mexico and S. A. Coasts; F. A. A. Int'l. Station WBR at Miami for 15 years; Many trips on SS Leviathan; Solid sea-service 1918-1933 and 1953-1971; Went through Typhoons "Charlotte" 3X and Typhoon Vera on 62,000 ton Carrier "MIDWAY" in Western Pacific.

With Adm. Byrd on first trip to Antarctica; With Sir. Hubert Wilkins on Trans-polar submarine "Nautilus"; Assigned USS CHICAGO, Mar. 3, 1905; On USS California at Pearl Harbor when Japanese hit; Torpedoed twice in 1942; "UWT" Station, Grunewald Hotel, New Orleans 1912; On duty NRS "NAH" April 15, 1912 - established sole contact with SS Carpathia, receiving first complete list HMS Titanic survivors for relay to AP, N. Y., Searched for "spy" stations in Chile and Argentina; 1910 Astoria Station "PC"; Fastest "Kana" code operator in service; Received Italian "Legion of Merit" for medical aid to ships at sea; Station "DM" Duluth, Minn. 1908; R/O FIRST Trans-Atlantic Airmail Flight 5-20-39, New York-Marseilles via Azores and Lisbon with PANAM. We could go on and on.

SOCIETY OF WIRELESS PIONEERS

P.O. Box 530 Santa Rosa, Calif., U.S.A. 95402

"OF, BY AND FOR"

That is what the Society is all about. Obviously, it would be impossible to publish all letters received so here are some picked at random. We will try to increase the number of letters in the coming issues of the "Journal" but here is a start.

● **DICK KAUFMANN** 33-TA (K2DMR) Reports first 3-months 1976 spent in Hsp at Albany Med. Ctr due secondary infection following surgery. Has made good recovery. Says... "SOWP is tops, and the publications are packed with interesting historicals. More power to you. 73's. ● All books excellent, especially the Year Book Directory listing names alphabetically, numerically, by ham calls etc. "I treasure them all - keep up the good work" says **MATTY CAMILLO** W2WB (750-SGP) ● **ROMAN GREGORIO** 848-M in letter posted from Longview, WA reports he is still aboard the M/V Hop Chong. Loading in Pac. N.W. for Europe via Panama, then return to Japan and the N.W. Sends "Cheerio's" to all. ● **ED. MARRINER** (W6LBZ) 313-P reports he made an interesting trip to England in Sept and was on the Isl of Wight where he saw a monument to Marconi at Alum Bay. Said there was a wireless station there in 1898. ● **GROVER W. WIZEMANN** - 73-SGP, W2ES says 'good nutrition' by devoted XYL is keeping him going Liked the comprehensive Directory, Best wishes to all. ● **JOHN TRENT**, QTH Anchorage, AK KL7DG reported. KL7AM - Bob so impressed with POC and SOWP Y/B he would like join. John reports he was elected Chairman Northern Lights Chap.88 QCWA after year as Sec. (He was founder of chapter). ● **GEORGE T. MITCHELL** 2353-M (K6ZE/PY8 reports he is due home on rotation from the 76-77 Amazon Expedition after 4-1/2 months. Home is San Diego. He enjoyed our last NL fwd to him in Brazil.

● **ANTON B. ANDERSON** "Andy" 1566-P Wilmington, CA. every now and then sends a book for the SOWP reference library for which we thank him. He wonders if SOWP has other 'sibling' teams? (His brother Arthur 851-P is also a member). Answer is yes Andy. (including Ralph Folkman with two sons. We have several 3-brother teams plus several husband-wife teams. ● **ART RYAN** 1049-V (W2ECZ/HK5) checked in from Palmira, Valle Columbia (CRA 25, 2115) moving from Jamesport NY. Now has ham license from Columbian Govt. and active all bands, SSB and CW w/KW plus. Says has nice home at 3M ft. altitude so no humidity and swimming pool he can enjoy the whole year 'round. Sends 73 to all old friends. ● **ELMER OSTERHOUDT** -203-SGP sez biz has slacked off a bit for which he is thankful as he and XYL Mabel plan to go to the Islands in Jan. It will be their 6th safari. Reports a buy for tourists to Hawaii is the 'Around Oahu' ride for \$1.50 you can buy at the Hawaiian Visitor's Bureau. Do you remember the

SS ROSE CITY/WWR back in 1920? Well Ed was on her. Incidentally Ed is owner of the Modern Radio Labs still selling radio parts and 'stuff' ala Hugo Gernsback circa early 1920's

EB CADY sez to pass on his 73. Wilco B4 we forgett it!

DITTO FROM Ye Ed, Bill, B.

KEN McINNES G3FTE (1380-P) whose QTH is 42 Clarence Ave. Palm Bay, Cliftonville, Margate, Kent, England sends 73. He says... get that call book out! (It was on its way when he wrote). He is interested in buying a Vibroplex Bug. = Just run across an envelope addressed by the Post Office to "SONS" of the Wireless Pioneers. Guess we are getting older than we think! ● **WM. S. "Bill" SILVER** 1924-V QTH Vanderhoof BC reports he has been in Scotland for the past year. ● **JOHNNY SANDISON** whose QTH is Regina, Sask. reports his new ham

● **VIGGO MADSEN** 1287-P sent us a Newsclip a short time ago about Member **ERIC COBURN** 704-SGP which appeared in the Beaumont (Texas) Enterprise-Journal. It is a full page otherwise we would reprint. The article is titled "A Lifetime with 'the Wireless'". Well written and very interesting. Our good member Eric had an impressive background, including tenure as Chief at WPA, RI and Mgr. for RCA at New Orleans, Galveston and Pt. Arthur, then to Grand Island with the FCC circa 1940. He got a retreat years later, his last ship recorded in 1963. He keeps his hand in however by riding along on a self-propelled drilling platform (law requires a radio operator aboard) then when the platform is put in place he rides a helicopter back home. (Thanks to others who sent us a copy of the clipping). ● **TED CARNES**, 576-SGP, Eigin IL says he got his first ham call in 1915 (9QW) as a 'kid' of 'cigar smoking' Maj. John Dillon. A few years later, in 1922 the same Maj. Dillon gave him his second commercial. ● **DON MOREHEAD** 1100-SGP

anchored at Fresno, CA. reports deceased husband of next door neighbor was brother of M. G. (Ab) Abernathy, Sec. Star of India Chapter. (Small world). Don plans trip to Hongkong Dec. 5th with some 250 Shriners (couples mostly) with stop over 5 days in Honolulu on return. Don was with CAA for 24 years after tour in Navy on USS W.VA/NEDJ, NPG, etc. ● **ARTHUR H. HART** (1068 SGP) W5WD ... HOX to you sends our letters addressed simply: BOX 530 95402. Anyway this one reached us. We sent one back addressed: 1446 71953. He got it. We don't know if the Post Office likes the idea or not but it certainly simplifies addressing. Hox say... "Congrats on '76 D/YB, Gud job all way thru... damn few would put in the effort you have done! (Coming from Hox, that is good.)" ● **GEORGE P. HONOLD**, W9GI 1068-SGP writes to tell us that since he has 'made' the 1976 Centennial, he is heading for the Year 2,000! Wonders how things will be then. Calls attention to omission of the area code in phone listing (715) TU. Geo. has contacted about 15 X-operators who were qualified to join. He signed up 4 (some 6 of them have become SK's - Geo. has been on 16 ships and 3 shore stations. went to Dodge Institute at Valpariso, Ind. 1920-21 Reports OSCAR W5QKU (SOWP CHOP) as doing a real fine job on 14, 125 Tue and Thurs. Send pix of Car Ferry Arthur K. Atkinson on run Frankfort and Manitowoc (he retired as Purser Jan. 31 1971). ● **FRED MANGELSDORF** (7-SGP) Sonoma, CA. is a busy man In addition to being Director of the Golden Gate Chapter he is Sec. of the 322nd Field Signal Battalion Assn (WW-1) and making arrangements for their 57th Reunion. They hit the beaches and active front at Chateau Thierry on June 25th 1917. Was at Coblentz Germany until July 1919. Fred says there only a very few in the Battalin left out of 450. MTF.

From The  Mail Buoy

Letters

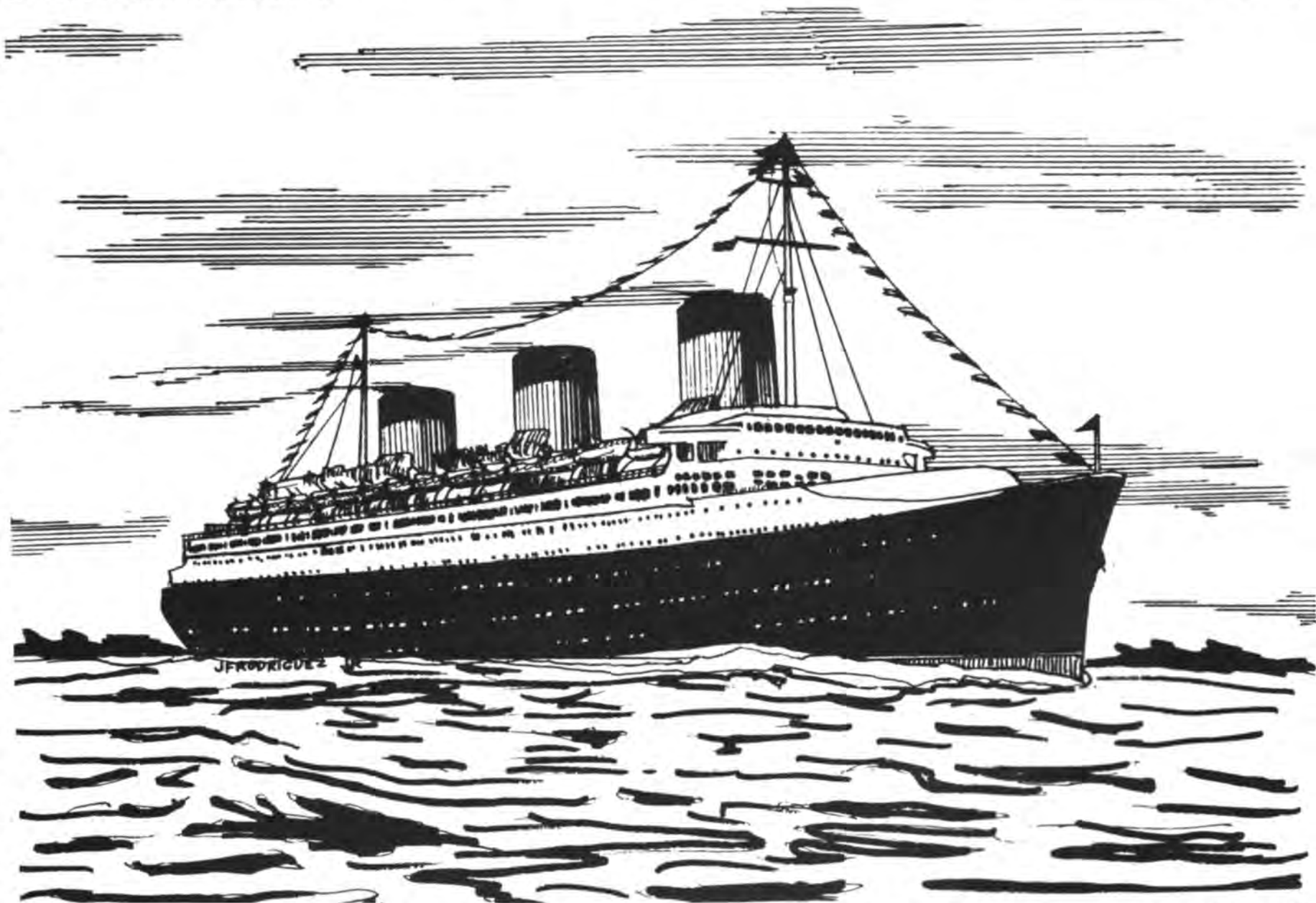


...from SOWP Members



THE WIRELESS PIONEER

license after all these years. It is VE5AAS. He says... "the inspiration had to be my membership in SOWP - many thanks to this wonderful organization. Incidentally, Johny is a full time announcer for TV & Radio in Regina.... a real busy guy with his finger on everything. ● **OTIS FITCHETT** 390-SGP. We had several cards and letters from "Oat" in his travels around the East this summer. He winters at El Cajon, CA. but back to Caldwell, NJ. for the summer. Visted the Thos. A. Edison museum at Ft. Myers and inquired from their officials about establishing a wing for SOWP in which exhibits might be displayed. "Oat" might be remembered as the Mgr. of the E.I. Co. 233 Fulton St. NY back in early 1920's for Syd Gernsback. He also is a SOS/CQD'er (SS Balabac - 1920). ● **EUNICE & KEN THOMPSON** (TA-31) report they are back in Florida (Orange City) after spending summer in New England. (spent time in Jackson N.H. this year and loved it (both rustic and beautiful). Visited Dottie and Mike Lamson, also Ed Holland and many other old friends. Eunice and Ken are Tech. Associates but should be full time members as they have signed up so many new members for the Society. They might also be remembered (by many) for the gigantic job of working up the OOTC "Blue Book" many years ago. A job that has not been equalled since in the Amateur Field. They wish to be remembered to all their old friends. ● **CHARLIE SEIBOLD** 2306-SGP run across an old copy of "CQ" (Vol. 2 No. 4 published Nov. Dec. 1932. Many many thanks. It should not be confused with the Magazine "CQ" published today. Found an article in this old issue by the Prexy of SOWP. He was 'at it' even back in those days with a monthly colume titled "The Rock Crusher" (Must have something to do with a non-synch rotary and the noise they gave out?) Tempus fugit.



The New "Sparks Journal"

(CONTINUED FROM PAGE - 1)

Another saving will be the reprinting of vital statistic type of material that has already been furnished officers, chapters and nets. This will bring members up to date on their friends and old shipmates and we hope at a minimum of expense in time and cost.

In addition to news about members, we hope to include a liberal sprinkling of historical material, plus the many short anecdotes, episodes and experiences of our members.

We will continue the publication of our "SPARKS" series in book form but will reserve space in this publication for the Historical Papers and memorabilia of the early days of the Wireless plus material of all kinds records the development of this mode of the communications art.

It might be mentioned that this, the initial copy of SPARKS JOURNAL QUARTERLY, at least in part, will use typewriter copy instead of set type. The cost of type per page runs approximately \$35.00 extra, so a publication of this type would perhaps run \$700 in cost for a 20-page issue. If our members find the typewriter copy acceptable, it would probably mean that we would be able to run larger editions than if cold type is used for cosmetic effect. You will have to be the judge, so let us know your feelings about this ... your paper.

The one thing we will try our best to do is to publish the JOURNAL on a regular basis and will give precedence over other matters and projects to accomplish this objective.

Incidentally - how do you like our new mast-head? It was drawn for us by our good member KYLE THOMPSON (908-V) who is a very fine commercial artist. This was drawn and donated as his contribution to the Society. We recognize his work as very professional and feel we are lucky indeed to have such a "Pro" on our team.

GREAT SHIPS OF OUR CENTURY

S.S. NORMANDIE—FNSK

MAGNIFIQUE !!!

The SS NORMANDIE built by the French in 1935 was epitome of all the laudatory superlatives one could think of when they talked about this great ship. She was the fastest. She was the largest. She was the most beautiful. The Salle a' Maget was the most elegant dining room afloat or ashore. In short, she was a grand ship and a real 'show case' for the French people.

The Normandie broke the Trans-Atlantic speed record on her Maiden Voyage in May 1935 and captured the "Blue Riband" from the SS Bremen. Her speed exceeded 30 knots. Later, in competition with the Queen Mary, she was to reach 33 KPH.

She was in fact a "Super" liner - over 1000 feet long and 79,280 tons. She booked 1600 passengers on her first voyage and went up to over 1800 on her third trip. Vibration however became a problem so speed was reduced and many attempts were made to overcome it. Many potential passengers deserted her for the smaller 'cabin' type ships of the day so in 1939 she tied up at Pier 88 New York due to lack of patronage. Later she was taken over during WW-2 by the U.S.N. and renamed the USS LAFAYETTE. She was designed to carry 10,000 troops; however fire Feb. 9 1942 did much damage and water used to extinguish it caused the ship to turn over on her side.. It took 18 months to raise her to an even keel after a monumental engineering job. The ship was eventually scrapped at a New Jersey yard, ending the short life of one of the worlds great ships.

The drawing above is by J. Fred Rodrigues Jr. - one of the top marine artists of the Country. Copies of this drawing, suitable for framing can be secured from Frank Braynard, author of the wonderful series of books on the SS LEVIATHAN, whose address is 98 DuBois Ave., Sea Cliff, NY. 11579. The tab is \$2. Artist Rodrigues Jr. has also sketched other great Ships of the Atlantic and in due time we hope to present them in the 'JOURNAL'.

Actually, this is an experiment, since we are not familiar with reproduction of our material in publication of tabloid form. We hope it works out and if so, promise to bring quite a bit more on the sea, in pictures and photographs in future issue-.



DELIVERANCE

(Sailor's Song of Thanks)

Fair blows the breeze,
Smooth roll the seas,
God speeds the Sailormen homing.

Bright shines the moon,
Landfall comes soon,
Now ends our perilous roaming.

Loved ones will hold us,
Soft arms enfold us
Again on the blessed shore.

Storms left behind us,
Fogs no more blind us,
We've cheated the Devil once more !

--- E. J. Quinby

A WIRELESS DETECTIVE IN REAL LIFE

How an amateur, working in the interests of the United States Secret Service, made permanent records of some 25,000 words transmitted by the German owned Sayville Station.

With the control of the German owned Sayville wireless station now in the hands of the United States Government and its operation governed by the American naval officers, details of the acts which led to the seizure are rapidly coming to light. Accusations of neutrality violation have followed thick and fast in the daily press and many disclosures made in unexpected quarters. That the principal evidence upon which the seizure was made was supplied by an amateur makes the story just that much more dramatic.

The story properly begins back in July of 1915, when the first rumble of suspicion came from Washington officials and found its way into the newspapers. It had been hinted in certain quarters that the Government might refuse to issue a new license for the new and more powerful equipment then being installed at Sayville. Persistent rumors of messages of a military character sent under cover of ordinary commercial dispatches in plain English and German caused the situation to be viewed from an angle more serious than that which concerned the right of the Government to refuse to grant the new license on the ground that no belligerent nation or its agents had the right to establish a wireless station in a neutral country after way has been declared. Some of the messages had been rejected by the naval censors on the ground that they were not what they pretended to be. Commercial orders, or pretended commercial orders, that could not in the nature of things be executed in Germany on account of the present commercial isolation of that country, were rejected. Certain messages to persons in this country to execute orders for goods that could not be shipped to German ports or would be useless in Germany in this time of war, if it were possible to get them into German territory, shared the same fate.

The fear was expressed that through apparently harmless messages the Sayville station might be used to communicate military information to German submarines. In answer, Dr. Karl G. Frank of the Atlantic Communication Company, which owns the station, said he did not consider this intimation worthy of serious consideration, for what it claimed was a physical impossibility. "In the first place," he said, "the wavelength used at Sayville is eight or ten thousand meters, whereas the wireless equipment of submarines would produce a very much shorter wavelength." When this statement appeared, a newspaper editorial called attention to the fact that information sent first to Nauen could easily be retransmitted.

And so the situation stood when, on 9 July, the United States Government announced that in the future the plant would be conducted by American naval officers in the interest of its proprietors. The official memorandum from the Secretary of Commerce stated that the new license had been refused because it had been learned that the Atlantic Communication Company is owned by the Telefunken Company of Germany, the controlling interest in which is owned by powerful German electrical concerns. Dr. Frank was identified as the New York representative of these controlling companies and Prof. J. Zenneck, who had been conducting so-called experiments at Sayville, was known to be a captain of marines in the German army and had been during the present war in the trenches in Belgium. The opinion of the Department was stated: "To grant a new license for a new station, erected since the war began, with German apparatus, avowedly under German ownership and control, communicating avowedly with stations known to be under the control of the Imperial German Government . . . would be an un-neutral act."

The seizure of the station was characterized as a 'precautionary measure' and rested as such in the public mind for ten days. Then on a Sunday morning, New Yorkers were startled by reading in their newspapers what was announced by the World, "the real reasons" for taking over Sayville. Investigation by the Secret Service, the account said, had established a definite probability that un-neutral uses were being made of the station, the exact nature and extent of these uses remaining an official secret. Great was the astonishment of readers when they learned that in the course of the investigation by the Secret Service, phonographic records were made by Charles E. Apgar, owner of a wireless experimental station at Westfield, N.J., for fourteen successive nights, of every message, every signal sent out from Sayville. These messages, according to the World, established the truth about Sayville. They showed exactly what had been transmitted. Two days after this comparison had been made, Cabinet officers officially took up the situation at Sayville. One week later came the announcement that the Government was preparing to take over the station. Two weeks later, this action was taken.

An interesting parallel is offered in the progress of this investigation and the action taken by the Government.

On 7 June the making of phonograph records of the matter sent out from Sayville was begun.

On 21 June the making of the records was completed. On 22 June they were sent to Washington. They were delivered by Chief W. J. Flynn, who had been in personal charge of the investigation.

On 25 June Secretary Redfield advised Secretary Lansing that to grant the long-pending application for a license for the reconstructed plant at Sayville "would be an un-neutral act."

On 27 June, Lieut. Walter S. Anderson of the Navy Yard staff took to Washington duplicates of the messages that had been filed at the Sayville station during the month. The value of the records caught by the phonograph lay in variations or discrepancies as they might show upon comparison with the messages as filed. Three days after Lieut. Anderson took the duplicates to Washington came the announcement that the Government was considering the taking over of the Sayville station.

On 7 July Secretary Daniels notified President Metz of the Atlantic Communication Company that the Navy would take over the actual control and operation of the Sayville station and the "necessary personnel would be sent to that station to take active charge of the administration and operation of the station."

By specific statute provision, the contents of messages sent by wireless must be held inviolate. The World maintained, however, that the phonographic reproduction of the messages sent from Sayville from 7 June to 21 June, inclusive, showed these significant things:

That striking variations from the customary methods of sending were recorded, the possibility of system in these variations being made apparent.

That in the repeating of messages and the sending of "message checks" there were similar variations from customary practice, with a similar possibility of system.

That these variations, undetected by the Government operators at Arlington and Fire Island, who 'listened in' nightly on Sayville, were made unmistakable by the phonograph.

In long distance transmission what is known as a Wheatstone tape machine is used. This punches out the dots and dashes on a strip of paper, the sending itself being mechanical. By the closing of a switch, however, it is possible to cut in on such transmission and to send by hand key, when it is necessary to repeat a word. The phonograph records showed that such repetitions as this were frequently made with so little loss of time that they must have been done by hand key. In the

A WIRELESS DETECTIVE IN REAL LIFE

Charles E. Apgar uncovers ingenious spy system

BY - M. G. ABERNATHY 1610-SGP



The amateur station of Charles Apgar. Equipment with which the Sayville wireless messages were recorded

some way, it would be possible, furthermore, to add a word or two, or even a sentence, in the middle or at the end of a message with no record to show for it.

Government inspectors had been visiting Sayville at intervals since April. Neither their reports nor those of the operators at Arlington and Fire Island, however, were able to disprove the allegations that continued to pour in regarding the uses to which the Sayville station was being put.

Chief Flynn was told to "find out" what really was going on at Sayville. He dropped over to the office of Chief Inspector L. R. Krumm of the radio service, and on 5 June this letter went from Mr. Krumm to Charles E. Apgar, of Westfield, N. J.

"My dear Mr. Apgar: Will you be kind enough to call me up Monday morning from your place of business? I am very desirous of getting in touch with you immediately, as I believe you can be of considerable service in a good cause."

Mr. Apgar was known to Inspector Krumm as a business man who had made wireless telegraphy his hobby for the past five years. With equipment made by himself his plant has shown extraordinary efficiency.

Nearly two years ago, Mr. Apgar turned his attention to the development of a method of recording wireless signals. He had been making phonograph records of messages since October of 1913. Though Westfield is only 100 feet above sea level, and though Mr. Apgar's aerial wires are well "treed in," he has taken messages from Government stations all over the United States; he has often caught San Francisco and he has even heard German stations.

As he perfected his system, Mr. Apgar came into contact with many experts in and out of the Government service, and what he has been doing is pretty well known to Chief Inspector Krumm. Responding in person to the letter, Mr. Apgar was introduced to Chief Flynn, and was forthwith commissioned to catch and record, until further orders, the messages that went out from Sayville.

Sayville starts transmission about 11 o'clock each night. It continues to send for two or three, sometimes four hours, depending a great deal upon static conditions. At 11 o'clock on the night of 7 June Mr. Apgar began his vigil. He continued into the night of 21 June, by which time he had filled nearly 175 cylinders, each big enough to take four minutes of conversation.

Chief Flynn at once turned these over to Secretary McAdoo of the Treasury Department, his superior. From the Treasury Department they went on to the departments directly concerned. Their contents, by statute provision, are inviolate. It has been alleged by the press, however, that some irregular things were brought to light by the records.

In the Sayville messages it was found that custom was frequently varied. Sometimes a word would be repeated twice. Sometimes there would be still other variations in sending that became apparent in the faithful reproduction of the phonograph.

An operator taking down the message by ear could very easily miss the possible significance of these variations. With his attention being centered upon getting the meaning he would regard the repetition as being intended merely to make the symbol clear. What Arlington and Fire Island did not note, therefore, the phonograph took down.

Numerous instances appeared where the messages were not always repeated in the order of their sending. Messages Nos. 73, 74, 75, and 76 would be sent, then Nos. 78, 79, 80, and so on. After a score or more of messages had been repeated, No. 77 would appear. Sometimes the missing message would come after only two or three others had been repeated. On one occasion forty-eight had been sent again before it appeared. Another nightly custom that offered similar opportunities, apparently, was in the "message checks." These are reports back to the Nauen station of the messages, by number, "received complete" the night before. These reports could read, for example: "Received complete 191 to 196, 199 to 210," etc. What had happened to messages 197 and 198 would not appear.

Each night, also, after the transmission was at an end, there was always talk of how the signals had come in, of static conditions of the night, between what hours signals had been the strongest, and matters of that sort.

Mr. Apgar made as many as thirty records in a night. Not all the "repeats" were taken when they were being made for the second time. The actual time of recording during the fourteen nights was a few minutes less than eleven hours. The number of words was in the neighborhood of 25,000.

One of the allegations regarding the messages sent out from Sayville has been that acoustic codes were used. In such a code, one word in one message, on from the next, and so on, make up a distinct message. It was contended that the variations in sending that were recorded might have indicated the key to such a code. The skipping of messages in the "repeats" might have been intended to emphasize them.

None of those concerned in the investigation in New York knows, of course, what was done in Washington after the records had been sent there. None of them knows what might have been brought to light when the recorded messages--the messages as they were sent--were compared with the messages that were submitted to the censor for his O.K.

Chief Flynn would not enter into any discussion of the matter.

"I made, under instructions from my superiors," he said, "an investigation into the situation at Sayville. In the course of the investigation Mr. Apgar, at my direction, made a series of phonograph records of the messages sent out from Sayville. He did the work for the Government, and he was paid for it by the Government, through me. The records he made are now in the possession of the Government."

When Dr. Frank of the Atlantic Communication Company read the revelations published by the World, he gave out an interview which quoted him with saying:

"That Mr. Apgar can record messages sent out by wireless on a phonograph cylinder is hardly worth discussing. That is physically impossible. I have never heard of its being done. If Mr. Apgar has accomplished it, he should get his idea patented and perhaps we will buy it."

On several occasions during the past year, reference has been made in magazines and newspapers to the dictaphone receivers installed by the Marconi Company in its new transoceanic stations. Among wireless men the dictaphone, or phonographic wax cylinder, method of recording is known as a development that made possible the reception of signals at a speed greater than that the most expert operator could achieve.

(Concluded on Page-20)



Folkman • WBAF

"WELCOME TO THE PEARLY GATES, SPARKS. ACCORDING TO THIS, YOU HAD ENOUGH HELL AS A WIRELESS OPERATOR--LIKE TRYING TO MAINTAIN A SENSITIVE SPOT ON YOUR CRYSTAL DETECTOR."

Radio NMR: Always Ready To Aid The Mariner

by CWO3 R. A. Warbutton, U.S.C.G.



U.S. COAST GUARD Station, San Juan, PR (Call NMR) as it looks today. →

Coast Guard Radio San Juan is located in a small, rectangular building as a tenant of Coast Guard base San Juan on La Puntilla in Old San Juan, just beneath the four century old city wall. The only indication of its communications capabilities is a set of microwave antennae adjacent to the building aimed at a tower on the opposite side of the facility.

When the U.S. Lighthouse Service and the Coast Guard were amalgamated in 1939, it became necessary to establish a means of communications to the service's facilities. Thus came to pass Radio Station San Juan/NMR. The new station was first located in a small room. At the outbreak of World War II, the facility had to be expanded, and was relocated. In 1971, with the ever expanding role of the Coast Guard, and related communications requirements, the station was again relocated. At this time a building was remodeled into five individual, soundproof, modern operator positions, an equipment room, and an office, to become the new home of Radio San Juan/NMR.

A KEY JOCKEY'S DREAM

NMR is truly "the last of a breed," in that it only operates radiotelegraph (morse code), having no radioteletype capabilities, and utilizing the available radiotelephone capabilities only in emergency situations to back-up Base Radio San Juan/NMR-1. This makes it unique in the Coast Guard and truly a "Key Jockey's" dream. International Morse Code is the language spoken by this station with her "maritime family" maintaining the old-time personal touch between operators. Marine information broadcasts, which include weather forecasts, safety and urgent navigational warnings, and distress information, are some of the many services provided and sent in the CW mode of transmission.

There are 18 watchstanders, broken down into four watch sections consisting of a Supervisor and three operators. The supervisor, in addition to guarding one of the required frequency bands, is responsible for the overall smooth operation of the watch, including handling all of the incoming/outgoing teletype (landline) traffic. One man is assigned to the International Distress and Calling frequency (500 kHz) and the three remaining men, including the supervisor, continually scan the high frequency (8, 11, and 16 MHz) calling bands.



The receiving antennae are located on Base San Juan, but the transmitters are located near the town of Isabella, approximately 60 miles from San Juan on Puerto Rico's northwestern coast.

Puerto Rico, the Virgin Islands, the Leeward and Windward Islands of the Lesser Antilles, or in more general terms, the Caribbean, make up one of the largest pleasure boating and commercial shipping centers of the world. A great portion of the urgent and distress traffic handled by NMR concerns disabled, overdue or sinking, and medical problems aboard these vessels.

MARITIME FAMILY AND AMVER

NMR works her "maritime family" around the world. Traffic from regular "customers" transiting such diverse and distant places as the Persian Gulf, Straits of Magellan, the North Sea, the Mediterranean, South Pacific and Indian Oceans, is not uncommon. With today's technology, such long range communications is not surprising in itself. However, what is significant about it is the regularity with which the 12 and 16 MHz operators work traffic, especially AMVER and OBS, from vessels transiting the world's oceans between the Polar caps. The "personal touch" and operator proficiency seem to

pay off with "steady customers" who work the station wherever they sail.

In terms of AMVER sail plans and OBS (Ship at Sea Weather Observations) traffic totals, NMR is unsurpassed by any of the Coast Guard radio communications stations presently operating in the Atlantic or Pacific areas, and reigns supreme as NUMBER ONE in this category. In 1972, the total of this traffic averaged approximately 3700 per month. In March 1975, it was averaging 6500 per month and climbing. Several times in the past year, these totals have surpassed the 7000 mark. The number 7000 is not a "magic figure," but more importantly shows that the station is "selling" a quality product to the merchant fleets of all nations, this being fast, reliable communications.

The Mona and Windward Passages serve as major sealanes for shipping between the large oil refinery terminals in Venezuela, Aruba, Curacao and the markets of North America and Europe. With such a concentration of shipping, the continual threat of a major Search and Rescue (SAR) incident from collision, grounding, sinking, or just a plain breakdown, is ever present.

Major SAR incidents are not an everyday occurrence, but NMR has managed to log its share. On each and every occasion, NMR has responded rapidly, relaying information and messages concerning the situation to the appropriate rescue facility or vessel. Two or three MEDICOs (medical situation messages) a week is average. Recently, however, there was a total of 20 individual MEDICO situations handled within a 12 hour period. In most cases, medical advice is prescribed by the U.S. Public Health Service in San Juan, but if requested, NMR has the capability to relay MEDICO messages to CIRM, Rome, Italy, an organization that also provides medical information to the maritime fleets of the world. Helicopter evacuation of sick or injured crew-members or passengers from vessels throughout the West Indies has increased, and in the majority of them, the communications of NMR have laid the initial groundwork. The AMVER system with its ability to provide AMVER Surface Pictures is a major factor in many SAR and MEDICO situations occurring beyond the operational range of helicopters for evacuations or speedy arrival of rescue vessels with SAR facilities. Thus the significant input to the "computer heart" of the system by NMR cannot remain unrecognized. It has not been an easy task, but NMR has in fact arrived as "NUMERO UNO" in the AMVER world, and it is evident that NMR has no intention of relinquishing the title. At least, not without a fight.

Whether it is the routine reception and relay of AMVER and OBS traffic, a report of a heart attack victim aboard a vessel, a distress call from a sinking tanker or a passenger liner reporting a man overboard; wherever or whatever the crisis at sea is, NMR is listening, ready to respond instantly. Around the world, around the clock, Coast Guard Radio San Juan/NMR, the "BIG SIGNAL," voice of AMVER, is there.

by CWO3 R. A. Warbutton, U.S.C.G.

UPPER LEFT

A watchstander copies a message from one of the many vessels that use USCGS NMR.

LOWER RIGHT → →

CWO R.E. SANDERS

...with help of fine crew, has made his Station No. ONE



Reprinted by permission Commander, Atlantic Area USCG. Photographs also courtesy of the Coast Guard.



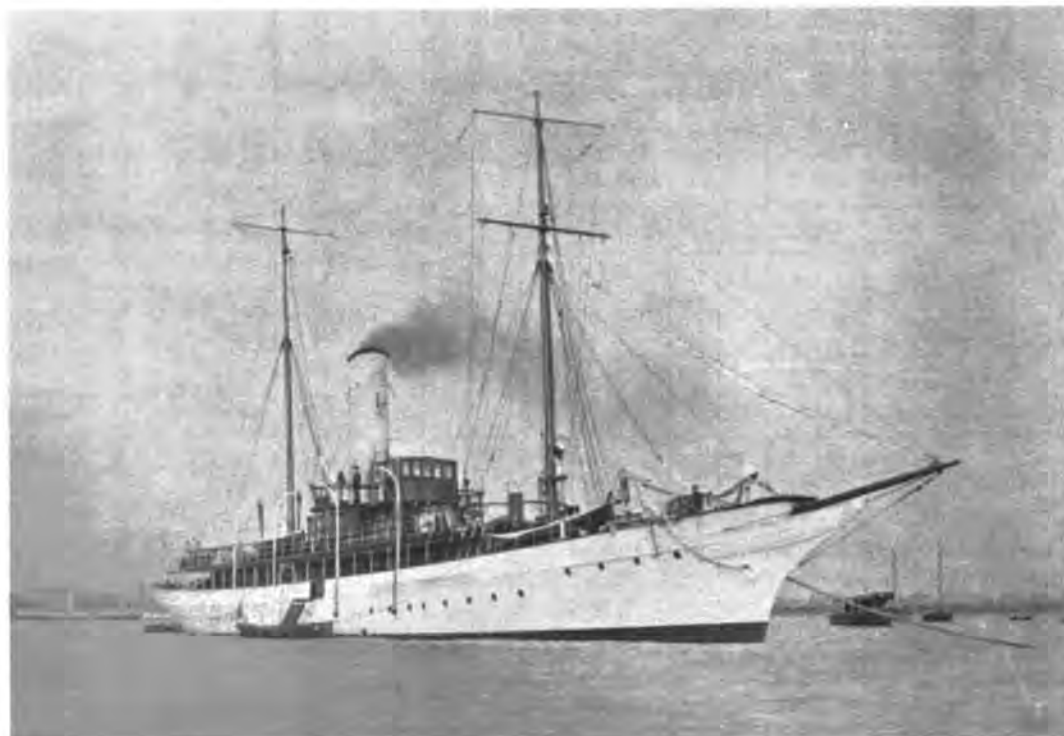
Commanding Officer, USCGS San Juan/NMR. Proud of his family of watchstanders.

Marconi and the Elettra

YACHT ELETTRA

The Yacht Elettra was built for the Archduchess Marie Theresa of Austria who named her 'Rovenska' in May 1904. Length 220 Ft. beam 27-1/2', draft 16-1/2'. At the outbreak of WW-1 she was anchored in British waters to the Admiralty requisitioned her as enemy property. She was on patrol and mine sweeping duties during the war.

After the war she was sold on the open market. Marconi bought her and named her the "ELETTRA". His daughter born some ten year later was named after the yacht. Marconi was very fond of her and enjoyed nothing more than experimenting in his 'floating laboratory'. The Elettra was sold in 1937 after Marconi's death to the Italian Government. The Germans 'requisitioned her in 1940 and she was torpedoed by a British sub in 1943 off the Dalmatian Coast. Raised in 1962 she was returned to the Italian Govt but is now a rusting hulk at San Rocco. A sad end for a glorious ship.



MARCHESE GUGLIELMO MARCONI (1874 - 1937)

Born in Bologna Italy Apr. 25, 1874, the son of a wealthy Italian country gentleman and an Irish mother. Early education in Bologna and later in Florence. He then spent about ten years at a technical school in Leghorn where he studied physics under Vincenzo Rosa.

He soon became interested in electro-magnetic wave technique and was absorbed with the experiments of Maxwell, Hertz, Branly, Lodge, Righi and others.

During his stay in Leghorn he became acquainted with an elderly retired telegrapher who taught young Marconi the Morse code. This increased his interest in the possibility of using the Hertzian waves to signal over distances.

His success of course is history. Regretfully the Italian Government gave him little encouragement so he went to England in 1896 where he received both assistance and encouragement.

He is shown in picture at left at the controls of his experimental transmitter on the Elettra. A lonely man, his happiest hours were spent aboard ship where he devoted his time and interests to study and experiment.

Pictures: Courtesy Marconi International Marine Co. Ltd.



'Since the days of Marconi'...

WHO INVENTED WIRELESS ?

An IDEA isn't worth much until it is put to work.

Great scientific minds of the 18th Century, beginning with James Clerk Maxwell in 1864 conceived a theory which later became known as 'Wireless'. Later, many others including Silvanus Thompson, Elihu Thompson, G. F. Fitzgerald, Sir Oliver Lodge and Herman von Helmholtz tried to demonstrate the theory experimentally but without much success. It was Heinrich Hertz who provided the proof and perhaps if he had of lived he would have developed the idea into a tangible entity to serve mankind.

Unfortunately, Hertz died in 1894 without completing his mission. Many others have been recorded as the 'inventor' of the wireless, and there have been many claimers for this distinction over the years. Some of those who may have 'some claim to fame' include the names of Belzod, Branley, Popov, Righi, Mahlon Loomis, Nathan Stubblefield, Tesla, Edison, Father Murgas, Prof. Ayrton and others. All of these men in some manner 'connected' with the idea but failed for one reason or another of developing it.



Hertzian Oscillator

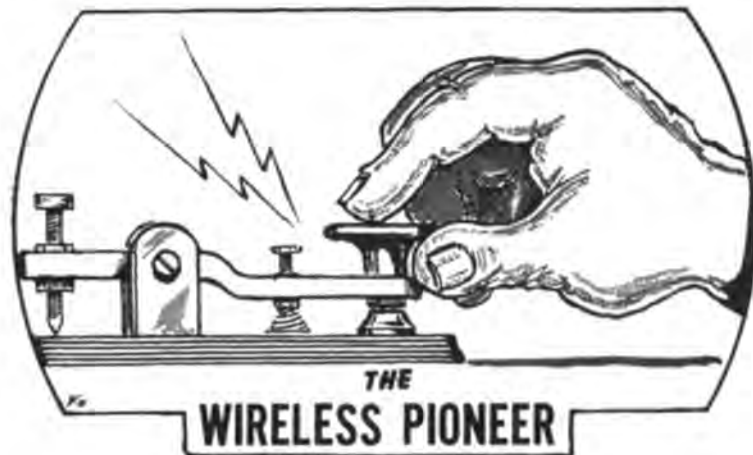
It was MARCONI however that PUT THE IDEA TO WORK.

He did discover a system that could send intelligence through space and was the entraprenaur who developed it for the benefit of mankind. This is the reason that the Society of Wireless Pioneers, Inc. use the 'by-line' . . . "Since the days of Marconi".

Marchese Guglielmo Marconi was a modest man. He never made the claim that he invented wireless. He merely put the components together, in the proper place, in the correct manner and thereby gave the civilized world one of the most useful discoveries yet conceived by man.

We still salute Marconi as one of the greatest benefactors mankind has ever had. - 30 -





OUR HERITAGE

(Continued from Page One)

With the passing of time and with many of the early day wireless men becoming 'silent keys' - the need for recording their experiences, episodes and the anecdotes and history of men and the equipment they used over the years has come into sharp focus.

One of our members recently remarked: "The Society is the first and only organization for Wireless men that has given us our rightful place in the sun". Regretfully, we must concede that "Heritage" of thousands of men and women over the world is for all practical purposes 'non-existent' because no one has taken the time to tell the world about the accomplishments and the achievements of the men and the industry brought mankind.

While we do not wish to seem overly sagacious in the matter, it is for us - the living to make up for lost time in recording the momentous events, the brave deeds and exploits of thousands of our craft in the saving of ships and lives, the inventions and innovations of those whose bright minds have shaped the destiny of man in many ways.

WIRELESS was the fountain-head of the communication industry that has spawned many things that we use daily and take for granted without thinking they were the progeny of this wonderful invention. To name a few - Television, radio broadcasting, facsimile, radar, loran, sonar, micro-wave control, sitor, satellite systems, etc. etc. There are so many innovations whose 'basic' is wireless that it 'boggles' the mind.

Our application for "Articles of Incorporation" with the State of California, sets forth the PRIMARY AND SPECIFIC PURPOSE of the Society under heading "A" as follows:

"The Specific and primary purpose of this corporation is to perpetuate the memory, heritage and traditions of all pioneer and veteran wireless (radio) telegraphers, and to acquaint the public with the exploits and deeds of the many heroic wireless men (and women) who have proven their courage and valor in times of dire emergency or disaster and of the many wireless pioneers who have directly or indirectly contributed to improvement of the art."

(B) Secondary purposes include: Organizing reunions and meetings for members for fraternal and social purposes; The maintenance of a Central Address Bureau to aid members find old shipmates and friends; Provide members with periodic publications

Maintenance of a library on Communication, electronic, marine and related publications for use by the Society for lending purposes when organized and properly staffed; Providing of suitable "Award" certificates or other forms of recognition for the accomplishments, bravery and outstanding deeds or contributions that are recognized by our Awards Committee.

Our application for articles of incorporation by the State of California as a non-profit organization has been approved. We also enjoy the same status with the I.R.S. (Exempt as a non-profit organization). We do not think that such exemption however allows members to claim dues paid as tax-deductable. (for your Information).

May we suggest in conclusion, that members make arrangements in a codicil to your will, that all artifacts, memorabilia, photographs of early day wireless (equipment and men) plus antique equipment, etc. be turned over to the Society. We have already witnessed many cases where very valuable collections have 'gone to the dump' because inexperienced executors thought it to be "junk" and of no value.

We might also suggest that consideration be given that the Society be considered in your will so as to underwrite its future. We know from experience that dues will not underwrite the entire cost of our operation, especially in funding the cost of publishing Historical documents, etc. It is a worthy project and should merit your consideration.

William A. Breniman
President.

Poldhu

A Sentimental Journey

Real and Imaginary

by "Vector"

Reprinted by permission -
Wireless World, April 1976

FIFTY YEARS OF THE BEAM

Holiday-makers in Cornwall may have discovered the charming little Poldhu Cove, a few miles west of Mullion. Relatively few visitors, however, make the short pilgrimage up a cliff path and round the headland to a spot which, if it had been in the United States, would surely have become a shrine long before this. For here was the cradle of long-distance radio communications.

But this is England (if the Cornish Nationalists will pardon the expression) so, apart from the magnificent views, there isn't much else to see. Some traces of building foundations, a granite obelisk and that's all, except for a plaque recording the bridging of the Atlantic by wireless signals in 1901 and the evolution of the beam system half a century ago. Of the mighty Poldhu station itself, scarcely a vestige remains.

Wireless telegraphy generated centimetric waves which were directed - well, more or less - by forms of parabolic reflector; then Marconi discovered that an elevated antenna wire gave better ranges than the Hertzian dipole mounted on the transmitting or receiving instrument and this ushered in a phase of omnidirectional working in which the reflector sank into oblivion.

Gradually the operating ranges increased to line-of-sight and somewhat beyond and it was found that the longer the wavelength that was used, the further the signals reached, until at length ranges were being recorded that were utterly inconsistent with theory.

Voltaire's comment that "If God did not exist it would be necessary to invent him" fitted the situation perfectly, except that in this case it was the ionosphere that had to be invented. It was a concept which was still being hotly debated twenty years later, until its existence was proved by the work of Appleton, Breit and Tuve, T. L. Eckersley *et al* in the 1920s.

Ionosphere or no ionosphere, the practical workers in the field evolved the golden rule that long distances could be achieved only by using long wavelengths and high power. It worked. By the 1920s wavelengths of the order of thousands of metres were the norm for long-distance working and the use of reflectors was in any case physically impracticable because of the huge sizes which would be involved. But by this time the reflector approach had long since been forgotten and plans were under way for a chain of longwave high-power stations to link the Empire.

In 1916, Marconi, who had largely been responsible for the trend toward long wavelengths, reverted to experiments on 2 metres but only for short range working. His personal assistant on this occasion, Charles Samuel Franklin, having an antenna of manageable size to work with, added a reflector and thereby concentrated the signal into a beam with consequent economies in power and an increase of privacy (the work was for the Italian Navy). Subsequently Franklin continued his short-wave experiments and in the immediate post-war period built a 15-metre link between Birmingham and Hendon which also used reflectors. This was also highly successful.

Every now and then reports would come in of the signals being received over long distances. There was also the matter of the amateurs who, confined to the then despised and "useless" bands below 200 metres, were occasionally reporting that their signals had been picked up in the USA and even further afield. Franklin pondered over these circumstances; true, reception was erratic in the extreme but that it occurred at all was remarkable. He persuaded Marconi to let him investi-

gate and in due course installed himself at the existing long-wave station at Poldhu. Here, working at astonishing speed, he built an 8-valve transmitter to operate at 97 metres, and a half-wave antenna with a reflector that could be switched in and out at will.

Aboard Marconi's yacht *Elettra* special receiving gear had been fitted and on April 11, 1923, the ship set out from Falmouth heading for Madeira and, eventually, St. Vincent in the Cape Verde Islands, with Marconi aboard. At first, it seemed, the experiment was a failure, for the Poldhu signals attenuated rapidly then disappeared altogether. This was the now familiar (but then unknown) "skip distance effect". Fortunately the voyage continued and, after some hundreds of miles, Marconi was able to record good reception.

The results were spectacular but left room for improvement. As it turned out later, 97 metres was a bad choice for daylight reception, while the reflector wasn't providing the anticipated increase in gain. But more than enough had been done to show the enormous potential in short-wave long-haul radio communication.

With all speed Franklin redesigned the transmitter for 92 metres working at a power of 17kW and at the same time improved the reflector, although this wasn't ready in time for the next series of tests. Even so, on May 30, 1924, Marconi was able to telephone direct to Sydney from Poldhu. Subsequent tests on various wavelengths between 32 and 92 metres showed that the daylight range increased as the wavelength decreased; on 32 metres, reception at Sydney was possible for 23½ out of the 24 hours. All the data from these tests were rigorously examined and formed the foundation of our present knowledge of the ionosphere.

The story of how the long-projected plan for a long-wave, high power chain of stations throughout the British Empire was abandoned in favour of the beam system is well-known. Perhaps less well-known is the magnitude of the gamble which Marconi took in offering the stations to the British Post Office and the Empire Governments. At the time of the contract, no fully engineered version of the beam transmitter existed; serious teething troubles were being experienced with the transmitting valves; neither the antennas nor the reflectors were fully engineered, while the problem of how to transfer the energy from the transmitter to the antenna without undue losses had still to be solved. To cap it all, Marconi had no means of knowing whether the long ranges obtained in the tests would continue or not. For all he knew, transient freak conditions might have been responsible - circumstances which might never be repeated. Although the contract was wholly conditional upon successful performance, he took the risk.

His decision was a measure of his faith in Franklin. And Franklin performed wonders. To overcome the valve problem he personally designed the first "CAT" (Cooled Anode Transmitter) valves in which the copper anode was also the envelope. Next, he re-engineered the transmitters, antennas and reflectors (and, with no precedents to guide him, the antennas themselves were no mean problem, consisting as they did of a large number of elements, all of which had to be fed in a common phase relationship).

Then came the matter of an efficient power transfer. Franklin solved this by the invention of the concentric feeder, or coaxial cable. And he did the whole lot in a matter of months - he had to, because construction of some of the stations had already begun! Let's be honest with ourselves for a moment. How many electronics engineers of today have the capability of tackling an entirely new system and designing and engineering its transmitters, valves and antennas from scratch? And Franklin's end-products were no lumps, either. Forty years later one or two of his original transmitters were still in regular traffic service and in some part of the world may still be so - and that's engineering by any standards.

On October 18, 1926 the first beam circuit came officially into service, linking Britain and Canada.

Fifty years ago Poldhu station has since disappeared almost without trace and I suspect that C. S. Franklin is all

THE RE-BIRTH OF KPH 1920

By Raymond B. Walling, 1275-SGP

Two very interesting articles concerning the early days of KPH (1923-1925) have appeared in publications of SOWP under the authorships of Emery L. Simpson and David P. Gibbons. Neither of those articles covered the first two years that KPH was re-established after WW1. The following covers that era and is written from memory without the aid of notes, etc. It goes without saying that this had put a terrific strain on the old think box. But after all, it has only been 56 years ago that this story will begin.

The Navy had taken over KPH, then located at Hillcrest in the Daly City area, during the early days of WW1 and the call was changed to NWO. RCA expected to regain ownership and operation of the station at that location on termination of WW1 but the Navy chose to retain it.

I came into the RCA picture at Marshall in early 1920 through the courtesy of Mr. A. A. Isbell, then the Pacific Coast Supt., and operated the Trans-Pacific circuit (KET) until the re-establishment of KPH. W.R. Gompf was the engineer-in-charge at Marshall at that time but was later succeeded by Frank (Red) M. Roy. Frank had served on various ships on the Pacific coast and at the old KPA (PA) station at Astoria, Oregon. He was later succeeded by Ira C. Reid as engineer-in-charge. Frank passed away several years ago as a result of a car accident.

Most of the operators at Marshall were quartered in the RCA owned hotel on the station property. RCA provided a cook and a helper and furnished such items as fuel oil for heating and cooking and room laundry. Two modern bungalows near the hotel were provided for the engineer-in-charge and his assistant. A power house was located near the hotel. All electrical power for the station was provided from two large banks of storage batteries which were charged by a diesel driven generator. The diesel was of the "hot ball" type with two large flywheels. The "hot ball" on the engine was first heated with a large gasoline torch and when the temperature was right for vaporizing the fuel the engineer climbed on the spokes of the fly-wheel to turn over the engine. To the best of my knowledge we never lost a power-house engineer. There was no public electrical power within 10 to 12 miles of the station.

The station building was located at a slightly higher elevation about a fourth mile from the hotel. One could almost count on encountering a "geranium pussy" on the path between the hotel and the station building. The engineer-in-charge, Frank Roy, followed one of the critters through the grass and we did not associate with him for several days. We threatened to bury him up to his chin until the perfume subsided. The station building consisted of three operating rooms, the office of the engineer-in-charge and a furnace room in the basement.

The Trans-Pacific receiving antenna consisted of two narrow spaced wires supported by 7 or



KPH OPERATORS & STAFF - 1920

Standing, L/R: Raymond B. Walling (WG) - John F. Parachini (PI), Don P. Goodger (DG).

TransPacific Shift Engineers, Sitting L/R:

Cecil Bailey, Acting EIC; Gavin Purns, Sr. Shift Engr.; George Renish, Shift Engr. F. (Slim) La Violette, Shift Engineer.

8 365' guyed towers running into the back country for possibly 5 or 6 miles. Later those towers were dismantled (except for one tower for the KPH receiving antenna) and for other Trans-Pacific receiving uses. At a later date the Trans-Pacific system was replaced with fixed loops which were tuned with goniometers. At a still later date the loop system was replaced with a Beverage antenna of considerable length--possibly 10 to 12 miles. The KPH receiving antenna was a single wire from the top of the remaining tower to the station building.

Early in 1920 RCA began plans for the re-establishment of KPH with the controls and operation at Marshall and the transmitter at Bolinas; the location of the Trans-Pacific transmitters. Frank W. Shaw of KPH Hillcrest fame, and possibly before at "PH" at the Palace Hotel, San Francisco, was designated the chief operator and was assigned the task of establishing the station. Frank invited me to become the second member of the KPH operating staff and at least 2 seconds elapsed before I accepted. Within a matter of several days KPH was open for business.

The transmitter was a shipboard model P-8 quenched gap rig operating at about 1½ k.w. It was installed in a small "Chic Sales" type of a building at the base of one of the Trans-Pacific 365' towers. The antenna was a 4-wire flat-top on spreaders and suspended from the top (or near top) of the tower at a sharp angle to a ground anchor.

The receiving installation was something that almost defies description. The tuner was of the loose-coupler type of unknown origin or manufacture. The primary coil was tuned with a slider arrangement; the coil being approximately 12 to 14 inches in diameter and 24 inches in length. The secondary coil was mounted on a track for ease of adjustment in and out of the primary coil. Then it was also a 2-hand job. The secondary coil was tapped and adjusted with a switch. In those days this type of a loose-coupler was known as a

"churn" and this particular one was almost capable of making butter if you had the necessary components. The detector was of the regenerative type followed by 2 stages of audio. The tubes used therein were of the UV-200 and UV-201 types. The "churn" was later replaced with a model IP-501 Wireless Specialities tuner. A key, headphones, typewriter and a Morse line sounder completed the receiving and control installation.

Traffic was transmitted and received from the RCA San Francisco office by the Morse line operators who also handled the Trans-Pacific traffic. On occasion the KPH operators would handle the Morse wire for the KPH traffic but it was usually a mixture of the Morse and Continental codes.

At a later date the Morse and the Trans-Pacific operators were transferred to the RCA SF office and the Trans-Pacific received signal Marshall to the SF office and printed on tapes. The operator transcribed the taped signals and typed the messages on a typewriter. This system was utilized until the advent of RTTY. With the transfer of the Morse and Trans-Pacific operators to the SF office, only the Trans-Pacific receiving shift engineers and the KPH operator remained at Marshall. Only a very few of the unmarried staff boarded and roomed at the hotel.

If my memory serves me correctly KPH was placed in operation in April or May of 1920, with Frank Shaw and I standing 12 hour watches. Frank stood the 7 p.m. to 7 a.m. watch and I the other 12 hours. The watches were set up in this manner because of Frank's vast experience in marine coastal station operation and it was believed he was more qualified to woo traffic away from the Navy stations who were then open to commercial traffic. With the equipment Frank had to work with, he did a marvelous job of diverting some of the traffic to KPH. KPH was no competition to the Navy stations due to the low power of 1½ k.w. Even with Frank's vast experience in coastal station operation KPH had difficulty in maintaining normal communications with the coast-wise ships. The offshore range was a matter of possibly 1000 miles and we had to rely heavily on the Matson ships for an assist and relay. The Japanese passenger ship picture bride traffic was quite lucrative but again KPH was no competition to the Navy stations for this traffic. KFS was not competing for this traffic and to the best of my memory they never did. On several occasions when a Japanese passenger ship called the coast with his first traffic KPH would ask a Matson ship to tell the Japanese ship that his signals were strong and to go ahead blind with his traffic. This the Japanese operator refused to buy such a deal; he wanted to hear the station at the other end. So the traffic went to a Navy station and KPH twiddled its thumbs and ground its teeth.

After about 30 days of this dilemma Frank was forced to say "uncle" and requested a third operator. Frank was one of the finest operators I have ever known. His hand style of sending was pure music. Byron C. McDonald came as the third operator from the SS Nanking (KKEE). (Happy days - 8 hour shifts, 7 days a week.) Now if one of us

(Continued on Page - 10)



KPH Reborn : Walling

(Continued from Page - 9)

wanted a day off someone would have to pull a 16 hour shift to cover. This was also the case when we wanted to change shift hours.

KPH continued to fight a losing battle for traffic and we started heckling RCA for better and more powerful equipment. Our station log was mailed to Mr. Isbell daily and we began to enter some quite pointed and nasty remarks about our inability to compete with the Navy station and provide suitable service to the ships. We logged such remarks as "why can not KPH be equipped with equipment to do a satisfactory job" or "why can not a rotary spark be installed similar to the old KPH." No comment from Mr. Isbell although he had expressed his unhappiness that KPH was not getting the Japanese and other traffic.

One evening when I was on watch the Navy station NPF at Eureka called KPH several times and was answered each time without results. Finally the Navy station NPK at Point Arguello transmitted a general call "can anyone hear little KPH?" That remark was, of course, logged for Mr. Isbell's benefit but still no comment was forthcoming from him.

A few weeks after that incident the installation of the rotary gap transmitter was begun at Bolinas. The power was 7 1/2 kw. This transmitter was installed in the same "Chick Sales" building that housed the former transmitter and the same antenna was utilized. The installation was far from a thing of beauty but it proved to be very efficient and the signals covered almost the entire Pacific ocean. A number of squirrel-cage type of antenna loading inductances were secured to the bulkhead and the rotary gap motor and wheel were mounted on a piece of 2 by 4 lumber. The condensers were of the oil emersed tinfoil glass type. A minimum of maintenance was necessary - burnish the keying relay contacts and change the spark gap wheel. I wonder if any SOWP members or others might have a picture of that installation? (How I wish I had been a shutter bug in those days.) About all metallic objects at Bolinas were hot from the radiation from the Trans-Pacific Alexanderson alternators and maybe that increased the range of KPH.

On completion of the rotary installation Frank instructed Bolinas to keep it off the air and continue using the P-8 transmitter until Marshall called for the rotary. The reason for this was that a Japanese passenger ship inbound was expected to start clearing his traffic in a day or two and Frank wanted to surprise him and the Navy stations. And that he did! When the SS Taiyo Maru (JAHA) called a Navy station with his traffic Frank got the rotary going and answered him. The ship answered on the first call and said "FB KPH - here is a hundred." That was the end of the Navy competition. Frank hauled out the secondary of the "chum" for sharpness and copied the entire traffic file without a repeat. That was real operating. Much credit was due the Japanese operator for his smooth and precise fist. With this incident KPH's dilemma (traffic-wise) was a thing of the past and we could generally handle any traffic we could hear.

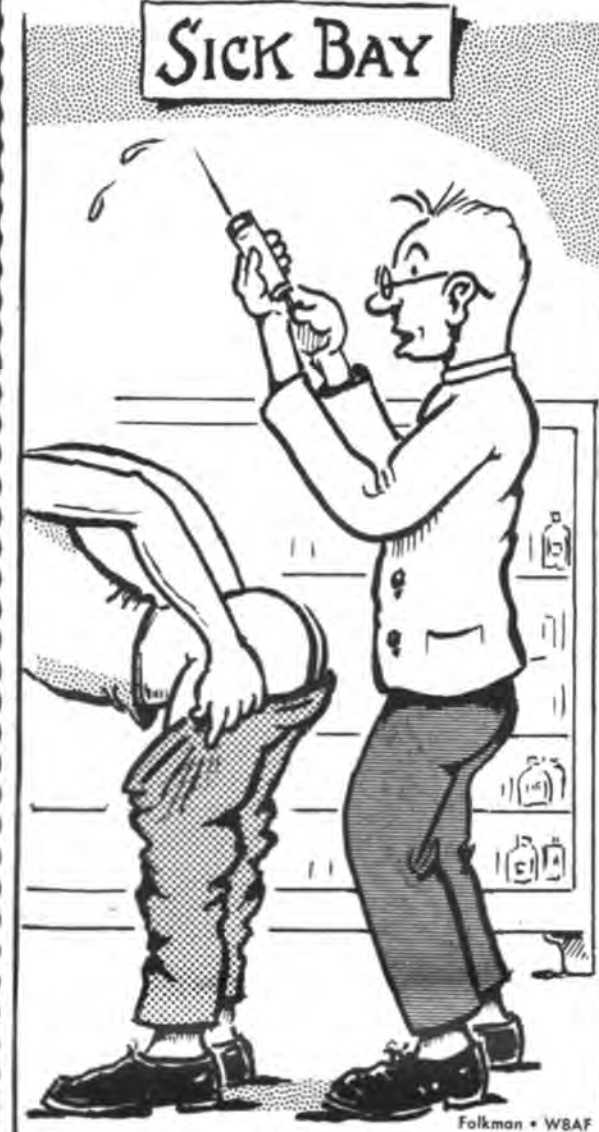
McDonald took a sudden yearn to return to the sea and shipped out on the SS Nanking (KKEE). KPH scheduled the Nanking her entire trip to and from the Orient when McDonald was aboard. Don P. Goodger came to KPH from the SS Lurline (WML) in replacement of McDonald. Don was a "cootie" key artist and a good one. It was necessary to have Bolinas adjust the transmitter keying relay for Don's cootie key, then re-adjust it for bug operation. We finally convinced Don that he should retire his cootie key and use a bug or hand key - he was agreeable.

Frank Shaw decided to leave KPH shortly after Don's arrival. Frank gave no reason for leaving but it is understood he went to New York. I have never heard of him or from him since that time. John F. Parachini from the SS China (WWA) replaced Frank. John was at Bolinas for a few weeks in connection with the installation of the 2 Alexanderson alternators for the Trans-Pacific circuit. These alternators replaced the 200 k.w. spark transmitter. (I believe it was 200 k.2.) John was generally known as "Jocko." Jocko sat in with me for one watch before he took over. Regretfully Don and Jocko have been silent keys for several years.

On several occasions RCA assigned student operators from the RCA Institute in San Francisco to KPH to sit in with the regular operators. The student was furnished a typewriter and a pair of headphones so he could copy along with the regular operator. If a student demonstrated above average student operating ability he was permitted to handle some traffic under the close supervision of the regular operator. Their stay was generally one to two weeks. After my departure from KPH I understand that on occasion a shipboard operator would appear on the scene but I do not know if he was assigned or volunteered. A shipboard operator named Al R. Lusey put in his appearance and stayed for several weeks during which time he sat in at KPH and the Trans-Pacific circuit. To the best of my knowledge Al was never on the payroll. Al was well liked and was greatly admired for his Army service during WW 1. It is understood that Al had been awarded several high U.S. and Allied decorations for valor and leadership. He carried a fragment of shrapnel in one of his legs and he walked with a decided limp. Al would never talk about his Army service. When asked for details his stock answer was, "Oh, it was nothing." He sailed on several Pacific coast ships and was well known by many old timers. Al has been a silent key for several years. I do not believe this story would be complete without the mention of some of the old timers who contributed so much to wireless in the dark ages of 50 plus years ago.

In possibly 1922 a 2400 meter tube transmitter was installed at Bolinas. If my memory serves me correctly, the transmitter was of medium low power and traffic-wise it was a dead loss. The receiver at Marshall was extremely inefficient. As I recall, this 2400 meter installation was primarily for contact with the SS Great Northern enroute from the east coast to San Francisco. (She was later renamed the SS H.F. Alexander and sailed under the flag of the Pacific Steamship Company.) KPH did not make contact with the Alexander until a day or two before her arrival at San Francisco. It was then learned that she had been contacting KFS on 1800 meters during all or almost all of her voyage from the east coast. It would appear that KPH did not get the word.

The SS Matsonia (WMP) was equipped with one of the first shipboard tube transmitter on the Pacific coast. The power was approximately 1 k.w. and was equipped for A-1, A-2 and A-3. The Matsonia made daily (or twice daily) test schedules with KPH whereby they would transmit a prepared test message by all 3 transmitter methods. The tests were reasonably successful and the daylight range on A-1 was approximately 1000 miles; the A-2 and A-3 range was considerably less. On a few occasions the Matsonia operator would say "consider the tests made" when it was time for the scheduled tests. Sometimes it took considerable persuasion on the part of KPH to get the Matsonia to start his test messages.



"YOU'VE BEEN WITH THIS STEAMSHIP COMPANY A LONG TIME ... I NEVER FORGET A FACE."

There were many other incidents which occurred in connection with the KPH operation between 1920 and 1923 during my stay there. Several distress calls were handled, namely, SS Whittier (WHT); SS City of Honolulu (KUSD); SS Santa Rita (WBR); and a freighter enroute to the Panama Canal from Honolulu who had dropped his wheel. A tow was arranged and she continued to the canal. The distress call from the SS Klamath (WSX) was received at KPH but a ship or ships in the area rendered the necessary assistance. The Whittier straddled a rock in the vicinity of Point Reyes and I believe she broke her back. On this particular occasion I had left the KPH room to get a cup of java and also take a look at the building furnace in the basement. As I was returning to the KPH room I heard an extremely loud signal that was nearly knocking the headphones off of the operating desk. I did not pay any attention to the signals until I had sat down and taken a couple gulps of java. It was then realized it was a distress signal and he was describing his plight and was requesting assistance and called KFS. When KFS did not answer immediately I acknowledged the Whittier's transmission and put out a general distress call for assistance from ships in the Whittier's area. A Coast Guard cutter acknowledged my call and requested further particulars concerning the Whittier. The information was given to the cutter and he asked me to QRX. By the time I had completed another general call the cutter called and said they were proceeding to the Whittier's assistance. I requested the cutter to QRX in hopes we could find assistance closer to the Whittier although the cutter was in the general area. The cutter's reply was "we are going to the Whittier's assistance" (period). I believe the Whittier was a total loss but I am not certain. The operator on the Whittier was extremely cool-minded and his fist was well controlled and perfect copy. I am hopeful that he and the rest of the crew were rescued without the loss of life. Should any of the readers of the above know of the final fate of the crew and the ship, I would appreciate hearing from them.

(Concluded on Page - 11)

SS. FRANK H. BUCK - WTO Associated Oil Tanker, ashore circa 1925 between S.F. and San Pedro. Refloated, later in collision with SS PRESIDENT COOLIDGE, 3-6-37 in Golden Gate Channel. Picture from Walling's Collection.



KPH-WALLING-30

The SS City of Honolulu distress was handled mostly by the freighter West Faralon and the USAT Thomas (WXM) in the area. Most of the passengers were taken aboard the West Faralon and later transferred to the Thomas who was bound for San Francisco. Fortunately there was no loss of life. The ship burned to a derelict hulk and was later sunk by Navy gun fire. RCA and KPH did not receive much credit and publicity for this event. Some of the details concerning this event are slightly hazy as I was not on watch at the time. The operators were W.P. Bell, Duke Hancock and N.C. Kumler. At a later date RCA made awards of gold watches to the operators and considerable publicity was derived therefrom. Duke was a silent key several years ago; he was a close friend of mine. I do not know the whereabouts of Bell and Kumler. The Thomas gave KPH a several hundred word press message prior to her arrival at San Francisco.

The SS Santa Rita went aground on the west coast of Vancouver Island and was nearly high and dry to the extent the crew practically walked ashore without getting their feet wet. On this particular occasion I was transmitting special press reports to the British cruise ship SS Franconia on 600 meters and I had detuned my receiver slightly to obtain a better monitor signal. At the end of one transmission I asked the Franconia for a QSL and I heard VAE frantically trying to break KPH. I asked VAE what his problem was and he said KPH's signals had covered up a distress call and he did not get the ship's call or any particulars. VAE then put out several distress inquiry calls without results. With VAE's permission I put out an inquiry call and within a matter of moments the Santa Rita acknowledged the call as the originator of the distress call and reported the ship was almost high and dry and in no immediate danger. It is understood that she was pulled from the beach and she continued her voyage. There could not have been a more red face than mine. I never did detune my receiver thereafter when transmitting.

I have a beautiful picture of the SS Frank H. Buck (WTO) of the Associated Oil Co. almost high and dry on the beach between San Francisco and San Pedro. This was another incident where the crew could walk ashore without getting their feet wet. She was re-floated in a few days and towed to San Pedro for dry-docking and the replacement of a few bottom plates and she was soon back at sea. This incident happened in possibly 1925 or 1926 after I left KPH. I am hopeful this picture can be reproduced in Ports O' Call or Sparks.

One day a message was received at KPH from a Canadian ship between Honolulu and San Francisco; bound for the latter; that the ship had suffered major boiler damage and had been without steam for several days and their radio equipment had been inoperative for that reason. The message was to their agent concerning the boiler damage which had been repaired and stated that several crew members--6 or 8--had left in the ship's lifeboat enroute to San Francisco for assistance. I do not recall how long the lifeboat had departed from the ship. I do not recall the ship's name but if my memory serves me correctly there were 3 sister ships with names similar to SS Canadian Adventurer, SS Canadian Explorer, and SS Canadian Importer. The ship's agent despatched the red stack tug Sea Lion (KDOJ) from San Francisco in search of the lifeboat. The Sea Lion located the lifeboat in 2 or 3 days about 100 miles south of San Francisco and several miles off shore. The lifeboat crew were in excellent condition and were taken aboard the tug and the lifeboat in tow. The Sea Lion compiled accounts of the incident for publication in the San Francisco newspapers but KPH could not read her signals. The Sea Lion was equipped with a 250 watt spark transmitter and it goes without saying that she did not have much of an antenna. KPH requested the Sea Lion to shift to 450 meters but the operator insisted that nothing would be accomplished since there was no indication of antenna current on 450 meters. After KPH's continued insistence the Sea Lion did shift and he put in a beautiful signal. The news account consisted of approximately 2000 words and the Sea Lion's operator did a wonderful job of its transmission. It was amusing that when the operator made an error in his transmission he would say "damn" and continue with the message. I have often wondered if that gent is still around and if so if he would remember this incident.

On one occasion KPH keyed the KET Trans-Pacific transmitter to transmit about 20 messages to the British cruise ship SS Franconia who was west of Honolulu and bound for the Orient and could not copy KPH. The message (Concluded - Bottom Right)

SOWP NETS & SCHEDULES

NO.	NET (CW)	AREA COVERED	DAY OF WEEK	TZ (*)	LOCAL	GMT	FCY	CHOP-(a)	ANCS-(b)	Note #
1.	PICKERILL	NY-NJ-PA-CT-MA	MON TUE-THU	E	* 0800*	1300*	3670	W3FYD (Jack)	W2ZI "Ed"	
				E	* 1900*	0100*	3670	Do.	Do.	
2.	EDISON	FL-GA-SC-NC-TN	SUN	E	1400	1900	7053	K4JPF "Bill"	W4QM "Dale"	
3.	WESCAN	BC-AK-YT-AIB-WA	MON	P	1900	0300	3555	VE7WZ "Bill"	VE7RQ "Bill"	1.
4.	PAC. COAST	CA,AZ-NV-OR-WA-BC So. CA	THU FRI	P	* 2000*	0400*	3555	W6RNC "Fred"	W6UH "Ray"	
				P	* 1530*	2330*	7084	K6KHA "Ernie"		
5.	TRANSCON-1	North America	THURS	E	* 1100	1400	14125	W5QKU "Oscar"	Vacant	2.
				C	* 1000			W6IC-"Geo"(RJ)		
				M	* 0900					
				P	* 0800					
				C	* 1000*	1600*	14125	K4NP "Vic"	W5QKU "Oscar"	
6.	YANKEE/EASTERN	ME-NH-VT-MA-	SAT.	E	* 1000*	1500*	7040	W1DIU "Bus"	W3FK "Herb"	
7.	CAPITAL AREA	Washn. DC, DE, MD	WED 1-3	E	2030	0430	3550	W3NVD "John"	===	3.
8.	JACK BINNS	Pac. N.W. BC, etc.	TUE	P	2000	0400	3555	W7LQ "Ray"	W7AYO "Stan"	
9.	TRANSATLANTIC	US-CAN-Holland	SUN	-	-	----	1100	PA8GL "Cor"	vacant.	
10.	GULF COAST	TX-TN-OK-LA-AR-MS	SAT SAT	C	0900	1500	3765	W5FHN "Geo"	W5EJ "TED"	
				C	1000	1600	7050	W5TM "Ben"	W5FHN "George"	
11.	AVOCADO	So. Calif.	Daily Daily	P	0830	1630	7084	W6KHA "Ernie"	W6YD "Ray"	
				P	1500	2300	7084	do		
12.	TRANSPAC	WC-HI-Australia etc.	FRI	P	0500	1300	14010	K6UJ "Brandy"	W6TH "Elmer"	

SSB - PHONE NETS SCHEDULED

(*) When Daylight Saving time in use.

A.	HAPPY HOUR (So. Calif)	Daily	P	1700	0100	3970	W6QOB "Fred"	W6BZA-"Fred"
B.	GOLDEN-GATE Happy Hour	Daily	P	1700	0100	3945	W6OFL "Holgy"	
C.	"PICK-PHONE" (Same as No. 1)	TUES & THU SUN	E	1700	2200	3975	W2LEL "Don"	
			E	1415	1915	3917	W2LEL "Don"	
D.	"FOGGY-BOTTOM" (Capital Area)	2 & 4th TUE	E	1000	1500	3970	W2DUG "Jake"	4.
E.	WESCAN	Week-days (FM) Week-days	P	0845	1645	3740	VE7WZ "Bill"	
			P	0915	1715	147.3	VE7WZ "Bill"	

Notes: #1 Schedule 3: Uses 7055 (+/- 5kHz) Summer schedules. #2: Transcon: Suspends (official) June 15 to Sept. 15. #3 Schedule 7: Bi-monthly, 1st & 3rd Wed. #4 Bi-Monthly 2nd & 4th Tuesday each month.

NEW MEMBERS

You are invited to join any of the above nets. Other nets are encouraged for areas in which we do not have nets. New members are invited to write CHOP of the net they are interested in for schedule changes or information. Please enclose S.A.S.E. CHOP listed by reference to nets listed at left above:

No.	Name	Call	Address	City	State	Zip
1.	J. "Jack" Stanley Schantz	W3FYD	612 Randolph Ave.	Fort Washington	Pa.	19034
2.	Wm C. "Bill" Willmot	W4JPF	1630 Venus Street	Merritt Island	Florida	32951
3.	A.R. "Bill" Filtz	VE-7-WZ	#1-1093 Nicola Street	Vancouver,	B.C.	Canada V6G 3N9
4.	Fred. Huntley	W6RNC	P.O. Box 478	Nevada City,	Calif.	95959
5.	Oscar T. Harrison	W5QKU	422 Artesia	Spring	Texas	77373
6.	Sebastian "Bus" Gahn	W1DIU	118 Edgewater Road	Hull	Mass.	02045
7.	John H. Elrod	W3NVD	10933 Riverview Road	Silesia	Md.	20022
8.	Thomas R. "Ray" Rannels	W7LQ	24704 - 11th Ave. South	Kent	Washn.	98031
9.	Cornelia Gierum "Cor"	PA8GL	Nieuwe Kerkplein 29, Schore	36 (Zeeland)	Netherlands	3616
10-1	George W. Ahems	W5FHN	3216 Townsend St.	Dallas	Texas	75229
10-2	G. C. Benson "Ben"	W5TM	3915 North State St.	Jackson	Miss.	39206
11.	Ernest F. "Ernie" Wilmshurst	W6KHA	1495 Winter Haven Rd	Fallbrook	Calif.	92028
12.	Brandon "Brandy" Wentworth	K6UJ	460 Oak Street	Laguna Beach	Calif.	92651
A	Fred Winkle	W6QOB	2070 Balmor Drive	Los Angeles	CA.	90039
B	Emil A. "Holgy" Holgerson	W6OFL	401 Poplar St.	Halfmoon Bay	Calif.	94019
C	Donald B. "Don" Masten Sr.	W2LEL	RFD-1, Lattintown Rd.	Newburgh	New York	12550
D	Max M. "Jake" Jacobson	W3DUG	612 Ednor Road	Silver Spring	MD.	20904
E	Filtz, A. W. "Bill"		(Same as No. 3 above).			

SPECIAL NOTE: Mr. OSCAR T. HARRISON - W5QKU, 422 Artesia, Spring, TX 77373 is CHIEF OPERATOR FOR S.O.W.P. It is suggested you relay information to him about all assignments, changes in schedules or matters of interest relative Net Operations. CALL: CQ SOWP de (Call) at 55 minutes past any hour on 3555 kHz. You 'just might' contact a brother members. CX



DEDICATED — to the men who "went down to the sea in ships" as Wireless Telegraphers and all those who have earned their living "pounding brass" as wireless or radio operators since the days of Marconi.

Messages were sent blind and acknowledgement was received via 600 meter relay. It might be said that one does not make a practice of utilizing such a method. It was the Christmas holidays and I am certain that the addressees of the messages were most happy to receive Christmas greetings from their relatives and friends. Contrary to the belief of some, this method of transmission was approved by higher authority than the KPH operator.

In early 1923 I was transferred from KPH to KSE at Wilmington. Vernon Goldsmith of KHK fame was my relief. I.C. Reid was the engineer-in-charge at Marshall at that time.

It is hoped that my good friend Frank Geisel, SOWP #5 SGP, will find it possible to write his memoirs of his many years experience at KPH starting a few years after 1923.

Probably a few minor errors in detail will be noted in the foregoing dissertation since the starting was 56 years ago and the memory has gone somewhat QSB.

So, this is my memoirs of "The Re-birth of KPH - 1920."

--Raymond B. Walling,
1275-SGP

PRE MARSHALL & BOLINAS

Picture from collection of our First President, Richard Johnstone who was Chief at the old KPH Station at Hillcrest. This station too made history in the early days. "RJ" became a Silent Key Oct. 9 1972.



THE WIRELESS PIONEER

LETTERS FROM MEMBERS

Dear OM:

Since the arrival of "Ports O' Call" recently it seems I have little time to keep up with the local paper or the various magazines which arrive here each week! I find it absolutely fascinating!

The fine article by Thom L. Mayes fills a long awaited need! Those big machines as I recall covered the world and I recall hearing them off the East coast of South America, in the Philippines, in the Indian Ocean, Red Sea - you name it! Although I had the conventional "honeycomb coils" to load up the old SE 143 or SE-1220 Navy Standard receivers then in use, I never once missed WRQ press through a weak signal, QRM, etc. MUU DID use to make it difficult right around the English or Bristol Channels but otherwise you could rely on WRQ! This was circa 1925-1930 as I recall. The "Alexanderson" alternator was really a marvelous device and it is sad to think that they are gone forever!

The other articles are just as fascinating, particularly the list of distress calls since I heard several of them. Most memorable was S.S. ANTINOE in the unforgettable winter of 1926. I was "second operator" on a battleship, SS WEST NOSSKA and on this particular day the second assistant engineer came up with a cup of coffee as he had gotten off watch. I heard "ANTINOE (GKJY) call "CQ de GKJY QRM?" and was about to answer him as there was little else on the air. The engineer said, "Aw, forget it. Drink your coffee," or something to that effect! I had the phones hanging around my neck when I heard this long SOS, something like fifty or sixty-- it seemed--before GKJY signed! This really woke me up and I took the information to the captain who seemed not too pleased to be awakened and he pondered a minute and said we may be just as bad off! (We were light, a few tons of sand on the after hatch, since U.S. ships rarely lifted cargo from the UK in those days.) I might add that it was very dramatic to listen to KDWS (Pres. Roosevelt) working with GKJY!

One thing I wanted to mention re the loss of SS HALEAKALA (KORL). (She was registered in Long Beach, Calif., and operated by a Boston company, Sprague, I think, East Coast of U.S. to Brazil, Uruguay and Argentina. I understand the Hawaiian name means "house on fire" or words to that effect.) She was lost sometime in September, 1926. In the summer of that year I had been assigned to SS STEEL VOYAGER (KUFN) for a trip to Brazil. I was new in the business and had never been to South America. HALEAKALA was at Belt's Coffee Wharf here in Baltimore and I went aboard. I told the operator I wanted any information he cared to give me about traffic conditions and stations down there. He was very cooperative and a fine chap. I presume he was the man who was lost on that ship. He said he was "going to make one more trip." (I had been warned NEVER to say this as it was a superstition with some seamen that if you said it, you might not finish the trip!) Anyway, he said the captain (a man named Pratt, as I recall) was difficult but it was a pleasant run. Said not to rely on the Brazilian cable (National) but to say you wanted your message to go "Western" and it had a good chance of delivery.

I presume it was Mr. Bacuinka I was talking to since he did not introduce himself. Said he had originally wanted to attend West Point but had failed the examination. I recall, too, that he had a break-down in the high voltage power transformer and told me he had put it on the galley range to soften up the insulating compound. As I recall KORL had a 1 kw Navy Standard transmitter, not the usual 2 KW which many USSB ships used.

Coming back from Santos/Rio de Janeiro early in September 1926 I heard NAA send a QST requesting all ships in the vicinity of the West Indies to look out for SS HALEAKALA which had sailed from Hampton Roads about Sept. 2nd. There had been a strong West Indian hurricane some time after she sailed and I guess he simply did not get his SOS off.

About a week later STEEL VOYAGER ran headlong into another hurricane and our single wire flat top blew off too! Our cargo shifted (it was ore) and but for the grace of God and good seamanship by Captain Lawrence and Chief Mate, the late Charles A. Ryan, we may have joined all the rest of the ships which went out and never were heard of again. STEEL VOYAGER sailed for many years until a submarine got her Sept. 23, 1943, in the Northwest Atlantic. My last trip to sea was on STEEL TRAVELER in 1931. She got it too - Dec. 18, 1944, Northeast Atlantic.

I believe the listing of both SS ELKTON (KOFK) and HALEAKALA (KORL) should be 1926 instead of 1927.

I have been racking my memory for the date in April 1928 when I participated in the one and only distress situation in my time at sea. It was SS OVERBROOK, a tanker, which had an explosion in the pump room enroute to Baltimore from a Texas oil port. I was on SS FRED W. WELLER (KNY) of the Esso fleet, bound for New York from Texas City. I did not hear the SOS until the second mate woke me up - it was about 3:00 a.m. - shouting "Fire"! I went out on deck and things looked O.K., I am happy to say, but about 12 or 15 degrees on our port bow I saw a glow in the sky. I turned on the fine old RCA ER1445 DF and sure enough there was SS OVERBROOK (KLAE) sending an SOS on 600 meters. We got a fix on her and told the skipper who told me to let KLAE know we were on the way.

In about two hours we saw the tanker in the distance with three lifeboats of variously clad or partly clad seamen rowing toward us. The operator, a chap from Baltimore named Shulgach, came aboard shivering. He was soaking wet as they had abandoned ship and left him, true to old tradition, "at the key", so he had to swim for it. He was not a big man and I weighed in around 240 at the time so the pants and shirt I gave him seemed to go around him one and a half times.

NEV (Savannah) called shortly after all were on board and informed me USS WILKES (NRDV) would pick up the survivors. NRDV told me later that evening that good old KLAE had been sunk by gunfire as she was a derelict. This was my one and only experience with a distressed ship and it was unforgettable! (Except the exact date!) I know you get some long-winded mail and I guess this may set a record!

--Charles A. Seibold, 2306-SGP

ON THE MISSISSIPPI

ROSTER, U.S. CORPS OF ENGINEERS R. O. 1928 1959

RADIO OPERATORS who were with the Corps of Engineers, during period 1928 through 1959 as furnished by Member, Sigmund Piotrowski 312-P. "Pete" (WØEWF) was stationed at Station WZK for 6 years and served much time on ships of the USCoE in the lower Mississippi. Later "Pete" joined the CAA.

Name	Where stationed on land or boats	Last heard from
Diss, Paul F.	Grafton	Silent Key
Eiffert, Gus	Quarterboat No. 1	Retired
Yeazel - X-Navy	?	FAA Lovelock, Nev.
Sigmund, Herbert	Gouverneur	KXOK, St. Louis, Mo.
Bradford, Wm. - X-Navy	Ft. Chartres	Silent Key
O'Connor, Burl - X-Navy	Guyandot (later FAA)	Silent Key
Dripps, Byron	Guyandot (later FAA)	FAA Chicago
Buchanan, Wm. (Buck)	Ste Genevieve	FAA - Silent Key
McMurray, Ted W(AAO)	Selma	WBBM Chicago
Harvey, Howard WØBMU	Fort Chartres	KXOK St. Louis
Schechter, Lee	Fort Chartres	Unk.
Menge, John - X-Army	Penniman	FAA retired in Ottuma, IA
Ireland, Noble W4ZWD	On Box Dredges	FAA Atlanta, now Sea GG opr.
Rivers, Leon P.	On Box Dredges	Chicago ?
Webb, Frank (Static)	Tuscumbia, Gasconade	Silent Key
Reppy, James	Tuscumbia, Guyandot, etc.	Silent Key
Courtney, Daniel B.	Penniman and St. Louis Arsenal land stn.	S.W.P. member
Van Voorst, Wm.	Arthur Hider	Silent Key
Sherman, Russel (Prof.)	Penniman	Silent Key
Piotrowski, Sig (Pete)	Ft. Gage, Ft. Chartres, Selma and Thebes	FAA retired and member SOWP
Perry, Willis O. - X-Army	Service Base, Jefferson Barracks and St. Louis, Mo.	Silent Key
Volz, Esmond W4WTW	Ft. Gage and St. Louis maintenance radio	Retired to Florida
Day, Hiram C.	Arthur Hider and S.S. Mississippi tugboat	Silent Key
Smith, Geo. - X-Navy	St. Louis, Mo. and Washington, MO land stns.	?
Du Bard, Bill	Willow	Owens Radio store QTH?
Black, Jim	Tuscumbia	?
Malone, Joe W9BPX	Tuscumbia, Ft. Gage	To California ?
Price, Ralph WØZVS	Ste Genevieve	To Sullivan, MO
McCormack, Tom	Rdo mntnc	St. Louis, MO
Tomlin, Glenn	" "	?
Mitchell, John	" "	Vet. Admn. Jefferson Barracks, St. Louis, Mo
Boiler, Gene WØBI	Ft. Chartres	Dentist in So. California
Wentura, Francis W. W9AEX	Tecumseh	Gates Rdo engr., Quincy, Ill.
Jones, John Paul	Penniman, P.W. Wright	Silent Key
Hewley, Charles	Gouverneur, Cape Girardeau	California
Jansen, John	Selma or Thebes	Other govt. svc.
Mercer, Jim	?	Ford Motor, Detroit
Adams, Bill - X-Army	Short time on flood duty	?
Hennecker, Ray	DelCommune	Silent Key
Edler, Wm. (Whitey)	Ft. Chartres	FAA
Blanton	Guyandot	FAA
Chestain, Fred	Ft. Chartres	?
Fitzgerald	Radio mntn in St. Louis Mo. yards	Silent Key

Name	Where stationed on land or boats	Last heard from
Gibbs X-Army	CAA, St. Joseph, MO	Silent Key
Bay, Howard	Dredge Kennedy (this Kennedy is named after James E. Kennedy ex-Army Capt.)	?
Bauer, Wm.	Dredge Ste Genevieve	To FCC
Mason, Ed (Army Lt.)	St. Louis Svc Stn	?
Turner, Jim	Rdo mntnc	Retired, Tampa, Fla.
Hewley, Milton	" "	?
Tevlin, Leo J. WØZVJ	On Box Dredges	Army WW2

The above is a select list of ex-radio telegraph operators who were good code men and worked long hours. Time passes on fast but these are names that I can remember best. As I was with the Army Corps of Engineers and worked with them and transferred later to CAA. The list shows two names listed as Ste Genevieve, one is a boat and the other is listed as dredge which came about 1950's. The Box Dredges were non-propelled boats or barges which were moved about by tugboats. Box Dredges had wireless stations as far as I remember it was 754 meters. The boats Penniman was a flagship and hauled dignitaries around. She was walled inside with copper and really first class. She has ex-mayor Thompson aboard (Mayor Thompson of Chicago) and other Washington, D.C. dignitaries. Sometimes the Army Officer staff and West Point graduates would hold balls on the Ft. Gage or the Penniman. Many experiences are recalled of a personal nature and also of an environmental nature, like floods, fires, ice flows, groundings, and ship collisions.

I have written to the following suggesting they join the Society: Menge, Volz, Gene Boiler, Wentura, Courtney - also the ones with ham calls. I saw Volz, Turner, Menge in person and went to see Bradford whose aunt lived in Hot Springs, Ark. and reported he was a silent key.

It is possible some member of your staff may know of some of these ex-operators either directly or indirectly - that is why I made a list. Mr. Breniman should know Yeazel, Bradford, O'Connor, Dripps, Buchanan, Menge, Ireland, Piotrowski, Gibbs, and possibly others.

--Sigmund Piotrowski, 312-P



CALL IT 'WIRELESS'

"Haig's Page"

WIRELESS BEFORE PANELS & RACKS

By J. Donald Haig 1836-SGP.Sr.

For the following I am unable to come up with a completely descriptive title. Other selections might be for instance: "Bed Fellows with the Equipment," or better "Coastwise with the Wireless before World War One." There were only about half a dozen jobs running across the Pond in the American Marconi Company, and nearly everybody was obliged to run coastwise on the Atlantic side.

Each man's experiences were much the same, but different in point of problems, equipment and living conditions.

Steamship companies being what they were, the wireless was generally installed in a space not suitable or rentable as a stateroom. The lead-in often came down to the tombstone by a devious guyed-off route; prone at times to ground against the ship's upperworks. Because of the irregular and confined space available the apparatus was installed all over the place.

My first ship, the U.S.S. Vixen, was not an assignment--you had to enlist in the Second Battalion, New Jersey Naval Militia, in order to get the job. The gunboat "Vixen," a converted steam yacht built in 1896, complete with bowsprit, and stay sails, had served in the Spanish American War. Mounted four six pounders and two one-pounder rapid fire guns. At the time I joined her she was the training vessel of southern New Jersey, berthed at Camden, New Jersey, and was equipped with United Wireless Telegraph apparatus.

The beauty of a summer training voyage, "Down east," to New London, Marthas Vineyard, Newport, R.I., and Portland, Maine, in those days was the average nearby distances to Marconi's Station MCC - Cape Cod, for copying press and baseball scores. The latter being a must if you were to be accepted at all. Old CC, MCC, WCC put out a beautiful musical signal, strong enough to cut through static within reason, and provide a decent copy; although as everyone will remember: "Press," was flashed out to subscribers only; and still is.

Before the wealth of Newport and the North Atlantic Fleet moved to the West Coast, naval vessels were, when the fleet was in, lined up for miles up the Naragansett Bay, together with the great steam yachts of that opulent era. All were working each other and the shore stations at the same time on the same wave-length. Due to the variety and distinctive tones emitted by the different types of transmitters, it was possible to tune out unwanted signals by ear and copy your man. Coast stations cleared the loudest and best signals first--just to get rid of them.

"NAF," on the Torpedo Station worked the Naval ships, while WCI, on the Newspaper office in Newport worked the Fall River liners while "WLC" over at New London opened up at five p.m. to clear the night boats on the sound. Up town even the "YMCA" had amateur wireless and blinker on the roof, but down on the street when the Fleet was in they were nine deep to the bar. Teams could not transit Thames Street since that thoroughfare was curb to curb sailors.

On the Vixen I had the old type "D" tuner, consisting of single slide loading coil, interconnected with a double slide tuning coil, together with potentiometer and carborundum crystal detector. You threw in the loading coil slider for time signals and weather - nothing else was up there.

Secured to the bulkhead was the then new type "E" tuner which was loosely coupled--more selective, but did not pull as well as the conductively coupled type "D."

I never saw or heard of Type A or B tuners and wonder if any of my readers can enlighten me. After type "E" receivers bore model numbers such as the Navy's "IP-76," with everything brought out to taps, and was an excellent receiver. Then there was Marconi's multiple receiver, which could by means of the three

pole double throw knife switch be used either as a coupled or straight-away tuning circuit. This had a beautiful billi condenser on top which seemed to make no difference at all. A crystal detector plugged into a socket originally designed to accept a Flemming valve, but American Marconi did not furnish the valve, which was not as sensitive as the crystal anyway.

The type "SH" antennae change-over switch did away with the anchor gap. The copper tubing of the aerial circuit came down to the top of the "T" of the switch, and were shorted by spring copper jaws. These were separated by a fibre wedge when the switch was in the up or receiving position. However, if you put a jumper across the "T" connections you turned the lower resistance transmitter into a kind of a pre-selector and there was an improvement in received signals but had to shift the transmitter for each receiver setting, or you could install a small single pole switch across the antenna switch "T" for listening on other than 600 metres.

Transmitting condensers (Capacitors) came in two types--flat plate and Leyden jars, or tubular with tin foil shellaced on the inside and the outside of the glass. Most installations were to be remembered by the large mahogany case containing copper covered glass Leyden jars, connected in series parallel in order to reduce the potential overall.

The rotary gap was in series in the closed circuit with the helix and across the condenser. If you drifted the rotary gap too long when signing off, you were liable to puncture a condenser jar. If you carried spare jars, you replaced it with a spare that looked about the same--that is to say with the copper electroplating about the same height on the glass. Your thinking in those days was apt to be in quarts instead of farads and you afterwards called another ship for a wave length check.

On "KTT," the S/S Paraguay, a Sun Oil tanker, built for the Great Lakes, I was bunkmate with the flat plate short wave condenser which was installed at the foot of my bunk, a necessity in order to obtain a short ground connection to the port hole casing. This did not contribute to full length reclining. Ventilation was also curtailed by virtue of the fact that the port light could only be opened over a limited arc in order not to swing against the loading inductance. I learned this after received signals were interrupted if I opened it too far.

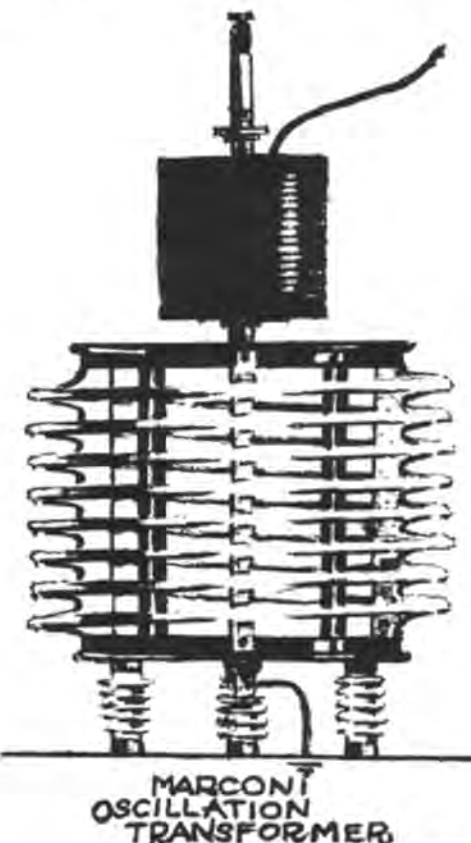
Typewriters and clocks were not furnished as standard equipment, in fact not at all, and my dollar Ingersol swung with the roll of the ship from a cup hook over the receiver. The Mate came down daily with a good accurate watch and transported the time up to the chronometer in the wheelhouse.

There was no mirror in the room and a stool was furnished instead of a chair. Oh, well, a stool for a dunce who would entertain such a seagoing career anyway! I carried a bucket of steam from the engine room and employed my watch case as a shaving mirror. The rest of the time I did not have to look at myself anyway.

The ship's dynamo was operated for lighting only at night; except for one hour after noon in order for me to send off the daily TR, ship's noon position. At the end of the hour the engineers shut down the ship's dynamo, whether you got through or not.

All ships at that time were DC ships, and a motor-generator was employed to produce 60 cycle 110 volt input to the coffin (high voltage transformer). Motor-generators were installed mostly under the bunk. They were beautifully running compound wound machines, manufactured by Robbins & Myers, and were started by a Cutler-Hammer hand starter. If you ran out of matches, you could get a light from the arc drawn at the first point of the starter. A lot of you already know about this one.

Choice of transmitting frequencies was at first designated tune "A" and tune "B." Tune "A" was 600 metres and tune "B" was originally 1000 metres for the Navy; later 700 for



the merchantmen and 800 for direction finding after that later invention. The short wave flat plate series condenser was cut in the ground lead by removing the shorting strap in order to work on 550 meters but few ever went to that trouble.

Notwithstanding the above crude conglomerate there was little trouble in getting together with another station since the damped wave emitted was so broad it could be easily tuned in and operating dexterity did for the rest. When you got to be pretty good you could by slamming the antennae switch up and down break in between words, but mostly you patched up your copy with the coast station after the complete transmission. The nearest thing to break-in at that time.

Passing along to a later assignment, on a coastwise passenger vessel, a view of the wireless room is selected because it portrays an average installation including the ten inch coil and 36 volt emergency storage battery, which latter were not always found on one man ships.

For the daily emergency coil test the secondary leads from the coil were cut in across the rotary gap, which latter was put in stopped position with the rotating arm set dismetrically across two opposite stationary lugs, creating a double jump fixed gap. At about this time in wireless history, the Wireless Company was engaged in patent litigation which prohibited the use of the rotary gap and the gap had to be used in this same stationary position. Distance covered was nearly the same but denied one the pleasure of drifting the gap. Who can forget those self appointed musical artists some of whom could literally make that old gap talk. An insistent and impatient lilt when starting up. The gap pulled you right along and sped you up as your signals rolled over land and sea; and then shutting her down with just the right time left to finish off the message.

Before the rotaries the straight gap was employed, emitting a sixty cycle note or more depending on the frequency of the supply.

The straight gap was contained in a gap muffler either wooden octagon or cylindrical mica, having a round glass peep hole for observing the spark. The complete gap muffler was built inside the helix, thus permitting short leads to the helix and the condenser. The upper electrode was adjusted by a threaded rod having a hard rubber knob on top for adjusting the gap length. After the oxygen in the gap muffler became consumed, the gap took on a better tone.

Even with this primitive equipment and accompanying discomforts, it was an industry wherein practically everyone was an experimenter. Great distance records were made. Much private equipment was brought aboard and some taken off. Operators carried their own pet crystals; often headphones and even loose couplers, not to mention speed keys, which were side swipers.

This apparatus indigenous to the "Wireless Age" in many respects has furnished a foundation for the birth of the "Electronic Age."

--J. Donald Haig

EDITOR'S NOTE: Member "Don" Haig may be remembered as the operator of the S. S. Powhatan who did the painting of his wireless shack on our Christmas Card 1976

LISTING OF NEW MEMBERS - CONTINUED FROM PAGE - 14. SPARKS QUARTERLY JOURNAL
SPRING - 1977

SERIAL	NAME OF MEMBER	Handle/Wife	Ham Call	TELEPHONE	ADDRESS (Local)	CITY	STATE	ZIP
2476-V	QUIGGLE, Donald L.	Don/Janice	WA3UNX	814/899-7142	3629 Freemont St.	Erie	PA	16510
2477-SGP(S)	COWDEN, Reuel E.	Mac/Margaret	W6TBZ	707/274-1358	4384 Highway 20 (Star Route)	Nice	CA	95464
2478-P	SCRUGGS, Robert H.	Bob/Mary	W2FRX	516/825-5722	860 Custer Street	Valley Stream	NY	11580
2479-V	GOULD, Jay Neil	Jay/Ruth	WBØUNK	515/496-5411	P.O. Box 27	Liscomb	IA	50148
2480-P	SMITH, Ross V.	Ross/Paula	VE3IGU	705/692-3374	P.O. Box 51, Lively,	Ontario, Canada	P0M 2E0	
2481-V	CONNELL, Matthew T.	Matt/Margaret	W7IRX	602/982-5723	P.O.Box 973	Apache Junction	AZ	85220
2482-SGP	WASHINGTON, Everett G.	George/Josephine	---	803/369-2582	302 Hampton Avenue	Honea Path	SC	29654
2483-V	WINNETTE, James C.	James/Jean	---	615/684-1288	P.O. Box 639	Shelbyville	TN	37160
2484-SGP	DIAPER, Wm. Felgate	Bill/Dcd.	WB6JDY	213/888-7238	24835 Jacob Hamblin,	Hidden Hills	CA	91302
2485-M	KERESTIC, Anthony M.	Anthony/Sarah	---	305/968-1785	1876 Baythorne Rd.	West Palm Beach	FL	33406
2486-V	MAJEWSKI, Michael S.	Ski/Jeanette	---	203/746-5286	Short Woods Road	New Fairfield	CT	06810
2487-P	EISENBACH, Marvin E.	Marv/Martha	---	206/746-9712	12110 SE 16th Place	Bellevue	WA	98005
2488-V	McCREADY, Glynn P. Sr.	Mac	W7WAT	503/267-7684	P.O. Box 1013	Coos Bay	OR	97420
2489-P	SUSKO, Peter	Pete	W8CEU & WB4ICK	N.F.	5301 Majestic Court	Cape Coral	FL	33904
2490-V	ANDERSON, Elizabeth L.	Eliz/Reg.S.	PA9ELA	01751-78770	Bloemcampiaan 82,	Wassenaar, The Netherlands		
2491-M	REESE, Warren T.	"TR"/Cathy	WB6TMY	707/762-5167	280 Douglas St. Apt.	"H" Petaluma	CA	94952
2492-V	FLEMING, Russell R.	Russ/Evelyn	WB9NYG&WC9AAG	608/849-4	371 Rt.#2,Auchter La.	Waunakee	WI	53597
2493-V	CLARK, Gene E.	Gene/Jean	W6DQH	213/451-0321	710 Wilshire Blvd #309,	Santa Monica	CA	90401
2494-P	BROCKDORF, Carl R.	Carl/Beverly	W8ZNG	616/984-5500	10950 W. Stanton Rd.	Trufant	MI	49343
2495-V	JACOBS, Ray E.	Ray/Helen	W6KD	714/295-2984	4546 Rhode Island St.	San Diego	CA	92116
2496-	WILLIAMS, Robt. L.	Bob/Margaret	W7FVU	503/285-6277	6240 N. Willamette Lane	Portland	OR	97203
2497-SGP	BROWN, Raymond F.	Ray/Rena	W2STF	201/261-3113	476 Wilson Ave.	Paramus	NJ	07652
2498-V	LeBLOND, Norman L.	Norm/Virginia	WØFNO	913/649-3636	10200 Mohawk Lane	Leawood	KS	66206
2499-V	GEORGESON, Lloyd W.	Lloyd/	---	516/727-6315	1333 Roanoke Ave.	Riverhead	NY	11901
2500-P	MEHRLING, Emerson R.	Em/Mary	W4NH	703/273-0737	10109 Blue Coat Drive	Fairfax	VA	22030
2501-P	SPAULDING, Leland J.	Lee/Peggie	K6LT	707/539-9732	7125 Oakleaf Drive	Santa Rosa	CA	95405
2502-V	BROWN, Richard E.	Brownie/Madeleine	W3CJL	215/797-0650	2705 Andrea Drive	Allentown	PA	18103
2503-SGP	MOORE, ALVIN R.	Al/Dorothy	K7AM	503/994-5754	P.O. Box 447	Lincoln City	OR	97367
2504-P	HERNDON, William L.	Luke/Evelyn	K4QQ	804/262-0431	7417 Landsworth Ave.	Richmond	VA	23228
2505-P	FURNELL, Howard E.	Howie/Lois	VE3FKF	613/389-7488	112-810 Castell Rd.	Kingston, Ont. Canada	K7M 5X1	
2506-M	DORN, David R.	David/	---	203/668-2402	65 South Grand St.	West Suffield	CT	06093
2507-P	SEWELL, Charles R.	Charlie/Patricia	W7LME	503/623-4183	1555 SW Fairview Ave	Dallas	OR	97338
2508-M	POLLANEN, Risto	Risto/	OH2TY	90-777567	Porvoonkatu 11 A 6 00510	Helsinki 51 Finland		
2509-V	YOUELL, Francis A.	Frank/Evelyn	WD4AYE	813/484-1814	1504 Oak St. -	Nokomis	FL	33555
2510-V	VESTER, Harold M.	Hal/Lenore	W6TU	805/644-4871	5512 Amherst St.	Ventura	CA	93003
2511-V	KNIFE, George D.	Dan/	W7IGE	208-466-1832	Route 6	Nampa	ID	83651
2512-V	FALK, Robert L.	Bob/Patricia	WØYCG	402/391-9089	7744 Western Ave.	Omaha	NE	68114
2513-M	MONTELLA, Joseph F.	Joe	KL7ITX	NF.	P.O. Box 324,	Seattle WA FPO - 98790		
2514-P	SURINA, Robert C.	Bob/Helen	W4KZQ	703/683-1358	2605 Ridge Road Dr.	Alexandria	VA	22302
2515-M	PARK, Joseph R.	Joe/Kathi	WB6AGR	NF	P.O. Box 237	Branscomb	CA	95417
2516-SGP	JOUGHIN, Jack M.	Jack/Marjorie	VK4JU	NF	P.O. Box 180 Buderim,	Queensland Australia	4556	
2517-V	SAMSON, Jos. Yvon	Rodger	---	661-6683	80 Bellerive St.	Villeneuve(Beauport)	P.Q. G1E 5S7	
2518-V	BOWEN, Reginald	Reginald/Pegge	WB2KFQ	201/222-8552	25 Fulton Ave.	West Long Branch	NJ	07764
2519-V	JENKS, Robert L.	Bob/Kazuye	K7ZVA	206/588-6090	11714 Masonic Rd.	SW Tacoma	WA	98498
2520-P	SIKES, Linwood E.	Lin/Teddy	WB4REV	803/723-4000	16 Trumbo St.	Charleston	SC	29401
2521-V	LATIMER, Russell Frederick	/Erma	---	902/466-7135	63 Johnstone Ave.	Dartmouth NS Canada	B2Y 2K6	
2522-P	ANDERSON, Elmer J.	Andy/Irene	W7CSC	503/282-5334	7119 N.E. Sumner St.	Portland	OR	97218
2523-P	CARTER, John J.	John/Helen	WB5JLB	505/325-2471	1006 East 26th St.	Farmington	NM	87401
2524-M	FERSTL, Thomas D.	Tom/Nancy	WA4SHV	912/627-9370	Route Three	Newbern	TN	38059
2525M	YAO, Liu	(9 Alley 2, Lane	231, Sui Yuen Rd. Taipei,	Taiwan, Republic of China)				
2526-V	SMITH, John B.	John/Shirlee	VE6IX	403/459-7157	47 Balmoral Drive St.	Albert, Alberta, Can.	T8N 0C1	
2527-SGP	BARTHOLOMEW, Fred G.	Fred	WA7VBJ	602/667-233	P.O. Box 1393	Parker	AZ	85344

New Members joining after February 1977 will be listed in the next Quarterly Sparks Journal. (End of Regular Members accepted)

FOLLOWING IS A LISTING OF "TECHNICAL ASSOCIATES" who have been accepted since the 1976 Directory/Year Book was published.

TA-53	PUCKETT, Lawrence E.	Larry	WB5CEW	601/885-5721	P.O. Box 311	Utica	MS	39175
TA-54	WILSON, John J.	John/Bertha	W7MC	503/771-3276	5119 S.E. Boise St.	Portland	OR	97206
TA-55	LEHR, Randy R.	Randy/Laura	WB9FKI	219/287-8801	622-E. Victoria St.	South Bend	IN	46614
TA-56	CRONAN, Wm S. III	Bill/Leonor	WA6NPB	714/448-8968	9056 Willowgrove Ave.	Santee	CA	92071
TA-57	PAVEK, Joseph R.	Joe/Eleanor	WØOEP	312/938-5942	243 Blake Road So.	Hopkins	MN	55343
TA-58	NAPIER, C. Jackson	Jack/Emily M.	---	415/868/0804	P.O. Box 176	Bolinas	CA	94924
TA-59	HAYMOND, Tom H.	Tom/Hilda	W8CCN	304/363-7147	R-7, Box 507	Fairmont	VA	26554

GOOD SAMARITAN

The vagaries of life now and then confine one of our members to a wheel-chair or in some cases they become paralyzed or bedridden. Many find time an "eternity" on their hands.

The Society has asked for volunteers on former occasions, those who would write our unfortunate brothers in a cheerful vein, on a weekly schedule. Usually they write about the early days of the wireless or reminisce about the 'old timers' that perhaps the unfortunate members has been acquainted with. It helps to pass the time and the therapeutic value can not be measured in dollars and cents. Often the afflicted member is not able to reply (although they would like to) and members have 'carried on'... like transmitting "blind". You hope it is picked up - and it is but the recipient can not "QSL" for the message. No power!

Several of our members have been carrying on this humanitarian work for a long period of time. One wrote for two years without a reply except a word from the stricken members sister telling of how his face 'lit up' when he got the letter which she would read to him several times.

The compensation we receive for doing it comes from the heart and the only real reward is the 'feeling' of inner satisfaction we get from doing a wonderful act which I am sure Divine Providence will not overlook when we cross the bar.

Should you wish to participate in the program, we will be glad to place your name on file so it will be available if and when the occasion arises. Also, members may know of situations in which we can employ the talent, patience and understanding of those who volunteer.... to carry on.

With the Society's thanks and blessings.

William A. Breniman
President.

Silent Keys

NECROLOGY LISTING of members who have crossed the bar for the last time and passed into the tranquil waters of the Great Beyond, since publication of our 1976 Directory and Year Book. May we always remember them.

<u>HORN, Charles S.</u>	791-SGP
10-25-75	Heart.
<u>MEGGERS, ALBERT L.</u>	1263-SGP
9-16-76	Cancer
<u>LEE, ROBERT E.</u>	1498-P
6-23-76	Unk.
<u>HALLOCK, JOSEPH H.</u>	148-S-SGP
9-17-76	Heart/Cancer.
<u>GRUNDELL, HERBERT C.</u>	98-S-SGP
9-17-76	Long Illness
<u>BELLIVEAU, STANLEY J.</u>	1302-V
9-17-76	Short illness
<u>WOLF, EDWARD HENRY</u>	1960-SGP
9-10-76	Unk.
<u>ROLEY, JOHN F.</u>	2164-P
3-24-76	Cancer
<u>LUNDT, JOHN F.</u>	2042-SGP
6-23-76	UNK
<u>DESPOSITO, HARRY J.</u>	496-SGP
8-22-70	(delayed report)
<u>MAKER, FRANK L.</u>	363-S-SGP
10-25-76	Long Illness.
<u>MUNGER, REX L.</u>	962-SGP
9-27-76	Unk.
<u>HYMEL, E. LeROY</u>	1678-P
8-16-76	Heart
<u>GREENWAY, LEWIS D.</u>	1328-SGP
11-2-76	Heart
<u>HARGUS, LOUIS F. Jr.</u>	1580-SGP
11-4-76	Cancer
<u>SANFORD, MURRAY E.</u>	2286-V
5-3-76	Cancer
<u>NELSON, WAYNE M.</u>	629-P
Unk.	Unk.
<u>MATTHEWS, WALTER I.</u>	167-SGP
11-13-76	Heart
<u>LINDNER, WALTER W.</u>	680-P
11-3-76	Unk (Grand Bahamas)
<u>DERRICK, WM M.</u>	TA-24
11-27-76	Unk.
<u>GAZZANO, SAM</u>	106-SGP
1-11-76	Cerebral Hemorrhage
<u>LEIGH, PHILIP P.</u>	239-SGP
12-4-76	Emphazima
<u>ROSENBERGER, BRUCE N.</u>	2032-P
2-2-76	Open Heart Surgery
<u>WEBER, LOWELL G.</u>	1653-P
11-21-76	Cardiac condx.
<u>SNYDER, Dr. ALEXANDER J.</u>	1725-SGP
11-26-76	After long illness
<u>EATON, LOUIS F.</u>	790-SGP
12-12-76	Unk.
<u>GERMON, RICHARD A.</u>	1245-S-SGP
12-19-76	Unk
<u>CRONAN, PHILIP G.</u>	622-S-SGP
12-28-76	Unk
<u>HARVEY, HENRY C.</u>	1144-SGP
12-10-76	Heart
<u>SHAFFER, ANDREW L.</u>	465-SGP
1-11-77	Long Illness.
<u>WOLCOTT, ERNEST E.</u>	32-SGP (C)
1-11-77	Long Illness.
<u>LIEBERMAN, MORRISS</u>	1633-SGP
8-7-75	Heart
<u>KENNYHERTZ, ALBERT C.</u>	601-P
1-21-77	Unk.
<u>PLUNKETT, GEOFFREY E.</u>	1779-SGP
8-5-76	Unk
<u>JONES, Cmdr. CLYDE W.</u>	1058-P
Unk.	Unk.
<u>NILES, ED.</u>	2295-S-SGP
Unk	Unk
<u>KING, KENNETH M.</u>	2030-V
June 1976	Unk
<u>BUCHNER, Lt. Collins R.</u>	765-S-SGP
Unk.	Unk.

Notice about our "Silent Keys" is sometime hard to obtain and delays occur in listing them. We would appreciate members sending in details, obituary notices, etc. covering the passing of members. We would far rather receive too many than none at all.

EARLY DAYS ON THE LAKES

During the summer of 1909 a high school buddy and I while walking up the street picked up a brilliantly colored red and yellow magazine bearing streaks of lightning across the cover. The word wireless and the name of GREENBACH was very much in evidence. We were very much impressed and proceeded to investigate further. It led to the discovery that the United Wireless Telegraph Co. had a station on the hill above Duluth. We visited the station and hung around there all that fall.

The second shift operator's name was Jimmy Grote and as I remember he had a cork leg. We soon picked up the Morse Code from Jimmy and after we became efficient enough to operate the station we were left in charge while Jimmy waded through the snow to visit a girl friend in the neighborhood. That was my initiation to wireless.

The first trick operator was O.R. Redfern and as I remember a Mr. Moe was district manager for United Wireless Telegraph Co. at that time. During the spring of 1910 I relieved the operators frequently and in April I was asked if my parents would permit me to leave school early and relieve the operator, Tom Joynt, at Grand Marais, Minnesota. I finally persuaded my parents that, because of my standing in school, I could make up the time after school in the fall. So I got the job.

Navigation on Lake Superior didn't open until late in April so I had to ride the four horse coach from Duluth to Grand Marais (110 miles) over a corduroy logging road to get to my new job. It took two days and one night, and anyone who has ever ridden over a corduroy road knows what a trip that was.

Tom met me at the bus (coach) and checked me out for about two weeks after which he took the first boat of the season back to Duluth.

The station was a three room frame building consisting of operating room in which there was a large closet, the 'Chamber of Horrors,' containing a five KW transformer on which was mounted a spark gap, and a rack of Leyden Jars (condensers). The inch and a half spark gap produced the noise which labeled the room as Chamber of Horrors.

The middle room of the building was the bedroom. It might be of interest to note here that, as there was only one operator at the station, I wore the Brandies phones at night and on many occasions woke up at the sound of GM which was the station call.

The third room was the engine room in which there was a single cylinder engine with two four foot fly-wheels driven by gasoline and employing a make and break ignition system (no spark plug) which gave me no end of trouble. The 10 KW alternator was belt driven and due to the fact that the speed of the engine varied considerably the lights in the station flickered plenty. (Incidentally mine was one of two buildings having electric lights. The other one was the Trading Post.) The exhaust of the engine discharged through a pipe and muffler which was buried in loose stones at the end of the building. When the breeze was from the right direction the fumes came up through the floor boards of the operating room and it was these fumes which nearly 'done me in.'

After operating for several hours during a rainy day with the doors closed, I was discovered slumped over the operating table by the town marshal who dropped by often to chew the rag. I recovered after two days in bed. No one knew then that it was carbon monoxide which caused the trouble. The one doctor in the county, Dr. Hicks, had graduated from a two year college about fifteen years too soon to learn that carbon monoxide could kill.

The antenna was a four wire, phosphor bronze affair stretched between two 60 foot poles, center fed. About midway under the poles was the 'Chick Sales' house and during a violent thunder storm the antenna was struck by lightning and the bolt also demolished the outside toilet. For some time that area was off limits for the townsfolks because of the aroma.

I might add that during that summer I had my first romance, with the sheriff's daughter, even though I was only fourteen years old.

I believe that I was the youngest Commercial operator in 1910. Would be interested to know.

--Charles M. "Doc" Dibbell
367-SGP - W3HTS



SOWP 'QSO' PARTY

Last year's QSO party was such a success that Bill WILLMOT who was Skipper on the project suggested a repeat, so here it is:

DETAILS: The date/s will be JUNE 4-5 1977 from 0000 GMT June 4th to 2400 GMT June 5th. Suggested Frequency is 55 Khz up from the low end of each amateur band... (same as we used last year for those who remember and participated).

A BRIEF HISTORY

ROYAL CANADIAN

CORPS OF SIGNALS

During the South African War a correspondent Winston Churchill suggested an independently organized Signal Corp in the British Army; no one listened, he being somewhat radically minded.

Canada organized first independent Signal Corp in the British Army. Ottawa recognized the importance of signalling within the army by 1903, and an ex British army officer, Capt. Bruce Carruthers, was appointed assistant Adjutant General for signalling at NDHQ.

He planned a separate branch to have his ideas approved and so the Canadian Signal Corp was born, though not named, sharing communication responsibilities with the engineers until 1919. Major Carruthers died in 1910.

Named Canadian Signal Corps in 1913, training was confined to telephone, flag, lamp and heliograph. Higher branches of communication were still Engineers' responsibilities, so during WW1 the Signal Company of 1 Canadian Division and other Signal units were combinations of engineers with wireless and telegraph and the Canadian Signal Corps sections. Elroy Forde during WW1 rose from Lt. to Lt. Colonel and became CSO of the Canadian Corps. Through his work by 1918 Canadian communications were so developed as to require four division Signals, one division artillery Signals, an artillery bde Signal section and a corps signal. Signal training was confined to visual and line telegraphy at a depot in Ottawa commanded by a Lt. Col. Powers.

In England wireless training was done at the Signal training depot and in France the Canadian Corps Signal school trained men for signals. In 1917 the school in France undertook wireless training. The Canadian Corps used the most wireless in WW1.

Col. Forde persuaded the general staff in 1919 to continue signals in peace time. He formed a Canadian Signalling instructional staff. Signals were now separate from Engineers. Then the British formed their Corps. The Canadians modified the British cap badge, used the Carruthers designed cap badge for a collar badge (crossed flags over a beaver and the motto). Carruthers also coined the motto "Velox Versutus Vigilans."

In 1921, for a few months Signals were called the "Canadian permanent Signal Corp" and in the same year renamed "Royal Canadian Corps of Signals."

In the meantime Militia units were formed to be trained by five officers and fifteen WO's and senior NCO's of the permanent force. Among them was Capt. J.E. Genet of the Princess Patricia's Light Infantry, who joined the Corps at the first opportunity. In 1939 he took first Canadian Infantry Division Signals overseas as Lt. Colonel, served throughout the N.W. Europe campaign as Chief Signal Officer and was promoted to Brigadier . . . Brig. Genet retired in 1947 as Honorary Colonel Commandant of R.C.C.S.

The Corps' first home was established at Camp Borden, Ontario, in 1922, known as "The Depot," RC Signals were mounted with their own horses. About this time also, Signals inspection and test department started in Ottawa.

In 1923 radio stations at Mayo Landing and at Dawson City in the Yukon were opened, starting the NWT&Y Radio System (Northwest Territory & Yukon Radio System), which grew to 23 stations, providing communications for mining companies, aircraft, trading posts, prospectors, R.C. MP, etc., also making up and sending weather reports to the Dominion Meteorological Service.

When airmail was instituted in 1927, RCCS provided a nationwide network of beacons to guide the aircraft.

The Corps school, Vimy Ridge Barracks, was completed in 1937 at Kingston, Ontario.

During WW2, RCCS formed five divisional Signals units, two corps HQ units, one army HQ unit, one L of C (Lines of communication) unit, and one CMHQ unit. There were also base units in North Africa, Hongkong, Australia and Burma.

Colonel Forde retired as Corps head during World War Two.

Since the war, besides Signals squadrons in Canada, there have been one in Europe and one in Cyprus and Egypt, since 1951 and 1956, respectively. During the fifties the "Canadian Army Signal System" handled on an average one hundred thousand messages per month.

During Korea, from 1950-53, Signals supplied communications on the brigade level and as in WW2 were all volunteers.

During the late sixties and early seventies, the integration of Canadian armed forces has brought about changes. The combined Army, Navy and Air Force Signals is now known as "Communication and Electronics Branch." They have even taken away our cap badge with "Jimmy Mercury" on it.

--C.W. Townley, 2307-V

An award will be furnished to each member who logs a minimum of 10 contacts. Log for verification should be forwarded to Col. Manuel (Pete) Fernandez, 129 Hialeah Road, Greenville, SC. 27607.

When you QSO another member, be sure and ask him his number and handle for verification which should be included in the log furnished "Pete". Also, send S.A.S.E. for return of the "AWARD" and logs if you wish them returned.

Those wishing more 'specifics' may write or call Bill Willmot (K4TF) QTH: 1630 Venus St. Merritt Island, FL 32952. Also please enclose S.A.S.E. ----- 30 -----

THE MODE: CW

CALL: CQ SOWP DE (YOUR CALL)

WIRELESS PIONEERS OF THE PACIFIC NORTHWEST

THE KILBOURNE & CLARK MANUFACTURING CO.

STORY BY HOWARD S. PYLE, CHARTER MEMBER 50 SGP, NOW SK.

Shortly after the turn of the 20th Century, a modest machine shop, operating as the Kilbourne & Clark Manufacturing Company, occupied limited quarters on the fringe of the down-town district of Seattle. In about 1907, their prime contract was the manufacture of motor-generators and rotary converters for the United Wireless Telegraph Company who themselves maintained one of several nation-wide factories in the same area.

It was not long before United Wireless was in the bad graces of the federal courts for some rather questionable stock manipulations which eventually sent several of their top executives to federal prisons. Meanwhile, wireless telegraph communication between ships at sea and strategically located shore stations was becoming of increasing importance not only to vessel owners but to the sea-going travelling public as well.

With a few minor exceptions, most of this communication was handled by the Marconi Wireless Telegraph Company, an English-owned concern which had furthered the original developments of Guglielmo Marconi in the use of the so-called *Hertzian* waves for communication without wires or other physical means of connection. The English Marconi Company had established American subsidiaries in both the United States and Canada. With the collapse of United Wireless, the American Marconi Company took over all of the U. S. assets of the former and became aggressively active in the wireless communication field in United States shipping circles.

Practically no competition was offered them. A few lesser manufacturers attempted to compete but met with only temporary success due to under-financing, patent right difficulties and similar handicaps. It was a wide open field for an aggressive manufacturer. Kilbourne & Clark, with its background in alternator construction for United Wireless, seized the opportunity. They acquired the services of Frederick G. Simpson, an electrical engineer with an impressive background, as chief engineer. Simpson had, to a considerable extent, specialized in wireless communication and, having a brilliant mind, conceived a number of practical ideas which were very much worthy of further development.

Phillip Noggle was employed, on the basis of his rather considerable background in wireless telegraphy, to head the experimental laboratory; the late Patrick J. Givnan as shop superintendent. Other officers of the company were C. A. Kilbourne, president; R. O. Hall, second vice president and assistant general manager and H. E. Jefferson, assistant chief engineer. To Frederick Simpson's duties as chief engineer, was added the general management of the firm, as well as the vice presidency.

With this nucleus, Kilbourne & Clark or "K & C", as it soon became known, commenced serious manufacture of complete wireless telegraph equipment. First for vessels, later, equipment for Alaskan fish canneries and other shore stations. As the market for this equipment increased, expansion of manufacturing and laboratory facilities became increasingly necessary and, during their many years of active operation, K & C found it necessary to make a number of relocations.



The impressive plant of the Kilbourne & Clark Mfg. Co., in Seattle, during World War I days. Shortly after the Armistice of 1918, K & C moved to more modest quarters.

Naturally the American Marconi Company resented the competition which K & C was offering and filed a number of lawsuits alleging patent violations. K & C countered but was out-numbered in many court hearings as they were using a system based on that originally developed by Marconi and his associates. Meanwhile, many others had seen a lucrative field in providing equipment for wireless telegraph communication. Clark (no connection with K & C), Shoemaker, Fessenden, De Forest and others were becoming names in the wireless communication field. Local, state and federal courts were becoming a bit choked with patent infringement suits.

To counteract competition and to avoid, or at least greatly reduce legal difficulties, Fred Simpson, as chief engineer for K & C, came up with a significant development. He devised circuitry which involved the use of a mercury arc tube similar to that then popularly used in battery charging circuits. This development was patented by K & C and served for several years to avoid many patent infringement judgements against them. Nevertheless, numerous efforts were made to involve them in long and costly litigation.

With the newer equipment, operators on K & C equipped vessels and complementary shore stations, needed merely to swing the *rocker arm* on which the mercury tube was mounted, to make the equipment operative for communication purposes. The mercury tube, however, was somewhat *voltage-conscious* and on sea-going vessels where the potential from the ships' generating system was somewhat variable, the tube had an annoying habit of frequently extinguishing during periods of transmission. The ingenuity of the American radio operator however, soon fixed that! They quickly discovered that with little trouble, a few wires could be shifted once they were at sea and the tube was by-passed!

Legally this constituted a violation of court decisions in many patent cases, as the transmitters then became conventional as used by Marconi and others. However, just prior to arrival in port, the mercury tube circuit was blithely restored with a bit of *Mumbo-Jumbo* and no pain nor strain and all was completely legal when the ship nosed into her berth! While not actually officially condoned by K & C or their operating subsidiary, Ship Owners' Radio Service, such action by operators at sea was something to be shrugged off. As long as it avoided litigation, so what? It would be difficult to pin-point an actual case unless a rival company's *Sherlock* rode the ships!

Kilbourne & Clark not only existed for many years as a manufacturer of wireless (later known as "radio") apparatus for sea-going vessels and for many types of shore stations, but through its subsidiary, Ship Owners' Radio Service, furnished and assigned operators to ship and shore stations as required, accomplished international message toll accounting and similar details for owners of K & C equipment. The Marconi Company worked only on a basis of *rental* of its equipment, and its operators were employed by the Marconi Company itself, K & C sold its apparatus outright to the steamship companies and others and, while Ship Owners' Radio Service supplied the operators, they were actually in the employ of the steamship company, not K & C.

With the entry of the United States into World War I as a combat nation, a lucrative field was opened in the way of government contracts for many types of radio communication equipment for the armed services. Plant facilities, not only those of K & C but many others, proved woefully inadequate to produce the tremendous quantities of equipment suddenly required. K & C met the challenge by constructing an impressive factory,

laboratory and office building on the southern outskirts of Seattle's industrial area. While not actually occupied until 1919, its need was evident in early 1917. The previous plant, submerged in military contracts, was working night and day to keep abreast and who could even hazard a guess when the war would end?

With the signing of the Armistice in 1918, many government war contracts were cancelled. K & C was not excepted in this military recession. It suddenly found that the fame of its equipment had now travelled not only nationally but internationally as well. Even though contract cancellation indicated that drastic economy must be practiced, the demand for K & C equipment was such as to justify the new plant. Meanwhile, at the suggestion of the Navy Department, steps were taken to establish a powerful United States manufacturing and operating communication organization to take over the former activities of the American Marconi Company. After a period of negotiation, this was arranged and thus the *Radio Corporation of America* was born. With unlimited financial backing from a group of America's most powerful corporations, the radio communication picture began to change. Independents, such as K & C, were again subjected to much court action which they often found difficult to combat even though many of them were very sound financially. It was a hectic time. More and more of the independents gave up the ghost and withdrew from the stiff competition they faced.

Kilbourne & Clark doggedly held on, but the economic picture dictated a move to more modest quarters and an effort to enter the radio manufacturing field from a different angle. The introduction of radio broadcasting provided a silver lining to K & C and others. They immediately swung into design and production of entertainment receivers for reception of musical and vocal programs. Most were too late; large corporate interests were beginning to dominate the field of broadcast receiver manufacture and it became a case of dog eat dog or devil take the hindmost. K & C added to its production a number of minor items of amateur radio equipment in an effort to save the day. However, competing with manufacturers of long experience in the amateur field, and in which K & C had formerly never participated, it was a losing game. The economic struggle, patent litigation and fierce competition did to K & C what had been done to so many others. It was not long before K & C closed its doors for the last time. It were a grand old outfit! The writer was an apprentice boy with them in one of their early plants in 1915. Well does he remember their generosity in permitting a 17-year-old kid to remain after work each day, sweep the floor in the assembly room, and carry home with him all of the switch points, machine screws and nuts which he swept up! It went a long way in furthering your writer's amateur radio construction! Long may the memory of K & C live in the hearts of the old-timers in the wireless communication profession!

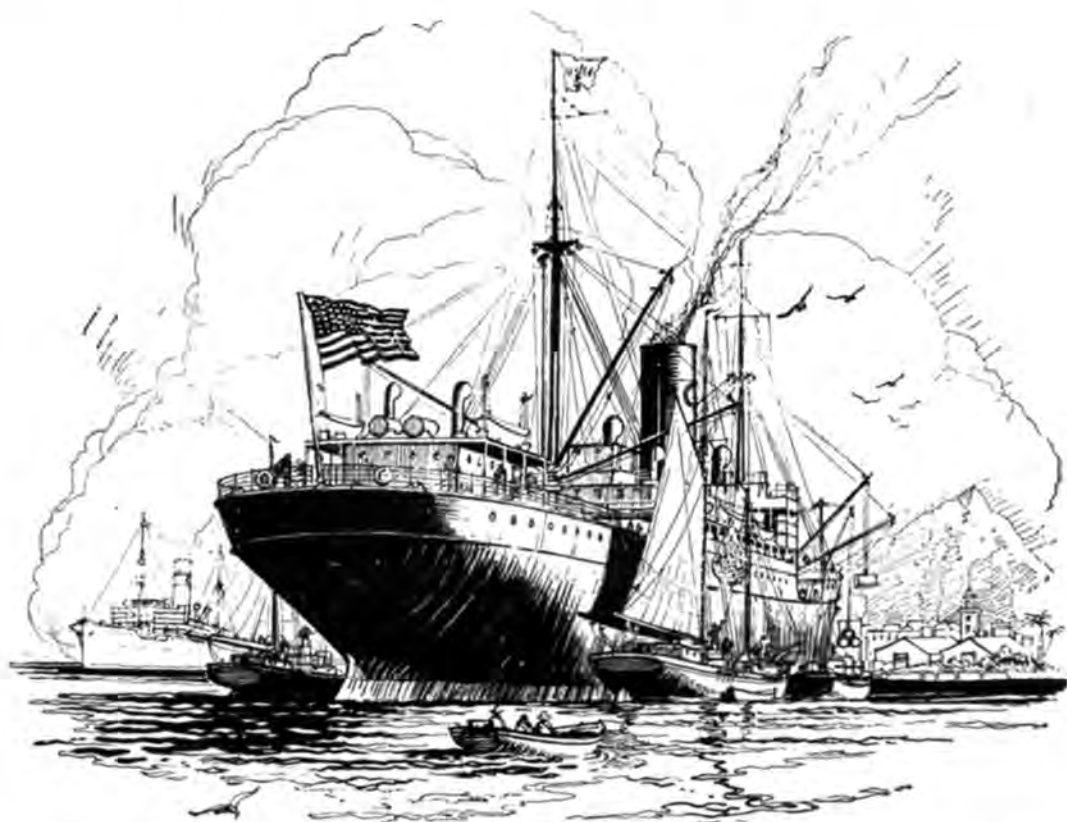
HOWARD S. PYLE "YB" 50-SGP

Howard's first assignment was aboard the SS RUSH/WNR in 1917 for SORS. He later served on all Alexander Line ships then many Alaska SS Co. ships. He operated at WGO Chicago in 1926 and joined the (now) FAA. Ye Ed worked with "YB" for several years. Howard published 9 books plus many feature articles such as this one. He enjoyed his amateur station W7OE. He became a Silent Key 11-28-1972 (Cancer).



Commodore Frederick G. Simpson, General Manager and Chief Engineer of K & C for many years. It was his brilliant development work which produced the mercury vapor tube transmitter which greatly reduced patent infringement suits against the firm.

UNUSUAL CARGO OF SOWP ARTIFACTS AND SCRIMSHAW



QSL CARDS FOR MEMBERS

SOWP SPECIAL

Many thousands of SOWP "QSL" Cards have gone out to members all over the world and as a result, we have received many letters of appreciation, informing how attractive they are and how members enjoy the identity and affiliation they furnish.

We will continue to furnish these cards at near cost. We have an arrangement with the Windsor Press to preprint the shells. By printing the color in large quantity press runs, we can then personalize the cards with imprint furnished by member at a very reasonable price.

Since it is difficult in this Quarterly to do justice to the cards (since only one color is used, we will not try to reproduce it. However, anyone wishing a sample should write, enclosing SASE and we'll furnish a sample card.

The blank spaces on the cards can be tailored to include data you wish to include which will be to include your name, handle, call and address on the left panel and in the Right panel, space for Assignments, name of ship w/dates etc.

Following is the price list of the Society's QSL CARDS which we are trying to keep at near cost. Price DOES NOT include insurance with is 40 cents on orders of value under \$15.00 and Sixty cents over \$15.00 in value. Please make sure this is included if you desire coverage.

TYPE "A" KROMOCOTE STOCK

QUANTITY	Note	100	200	300	1000
Shells	1	2.00	4.00	9.50	18.25
Pkg/Mail cost	2	1.00	2.00	2.85	3.25
TOTAL (Shell)	3	3.00	6.00	12.35	21.50
Imprinting(*)	4	5.50	6.25	7.75	12.50
TOTAL(Printed)	5	8.50	12.25	20.10	34.00

NOTE #1

"SHELLS" are the QSL cards printed on the face in 2-colors(black & red) without member's copy. This is Slick Kromocote stock. If you wish to order shells only for imprinting by your printer, we can furnish shells on 110 Index Stock (our type "B") at the following prices: 100 @ \$2.75; 200 @ \$5.40; 500 @ 11.10 and 1000 @ \$19.25. If you want insured, add 40 cents to above price. The 110 Index (B) stock is not as attractive as Type (A) Kromocote, but never-the-less it is a nice appearing card.

NOTE #2

Cost of packaging and shipping. Most will be sent PP or UPS. Price includes shipping but not insurance.

NOTE #3

Total cost except insurance for those wanting Type "A" Kromocote cards only.

NOTE #4

Cost of printing by Windsor Press. Copy will have to be furnished. Be sure copy is legible and correct.

NOTE #5

TOTAL COST OF IMPRINTED CARD except for insurance. Residents in California should add 6% tax of cost line 1 and 4 which is sent on to the printer.

Note: If color, other than black is desired, there is a cost of \$2.00. Cards are regular post card size 3-1/2 x 5-1/2 inches. Back(mailing) side is imprinted with usual QSO details.

SOCIETY OF WIRELESS PIONEERS, INC.
P. O. BOX 530
SANTA ROSA, CALIF. 95402

*DER SLOPPEN CHEST



PATCHES

(CRESTS)

These "PATCH" Emblems measure 3 inches across and are beautifully embroidered on a durable and washable cotton twill background with the finest threads available and each in nearly 10 matching colors. They are truly a work of CUSTOM EMBROIDERED ART, that you will thrill to wear at HAMFESTS and in fact on any or all occasions when a patch might be used for identification. They are just right for the arm or under the pocket of your shirt or blazer. The price is \$1.50 each postpaid by first class mail.

We also stock a larger patch which measures 7 inches in diameter for the back of a blazer. They are also suitable for framing. Price is \$5.00 each postpaid. (The higher price due to our ordering in smaller quantities, hence a smaller price break.

TACKETT EMBLEMS

TACKETT EMBLEMS can be used as a tie-tac or lapel pin without damage to fabric. It is a dainty, artistic pin that is a pleasure to wear. It must be because we have sold over 500 to members and some have bought two or three so they will not have to change pins when they make changes in wearing apparel. The body of the pin is 3/8 th of an inch and 5/8 from outside of pin in diameter. The pins (like logo of Patch above but without rope ring) are made of rhodium plate which we think even more attractive than Sterling Silver and will outlast the silver pins. Price at near our cost is \$5.00 each sent postpaid and insured in the U.S. and elsewhere via Air Mail but not insured. Sold on "money back" approval of complete satisfaction.



A beautiful personal identification of your S. O. W. P. membership. Rich blue velvet-like emblem and trim on a gold felt Bannerette. Crossbar, gilt spearheads, gold rayon cord and tassels. Simulated side borders and fringe.

PRICE LIST

PATCHES 3" \$ 1.50 ppd.
5" 5.00 ppd.

TACKETT (Tie-Tac - Lapel Pin) 5.60 ppd.

LABELS (GUMMED) SOWP (per 100)
#1 - Blue 3-3/4 x 1" 1.00 ppd
2 - Red, Round 1-3/4 1.00 ppd

BANNERETTES
9 x 12" Wall emblems . . . 2.50 ppd

STATIONERY

	QUANTITY	50	100	300
Letterheads		2.00	3.75	10.00
Note Heads		1.75	3.25	9.00
Env.#10 Large		3.00	6.00	16.00
Env.#6 Small		2.25	3.75	11.00

Prices are prepaid via 3rd class mail, in the U.S. and Canada. Foreign: add \$1.00 for shipping. PLEASE NOTE: If you want package insured add 40 cents insurance charge by P.O. Dept. We will securely package all items ordered but once delivered to the P.O. its your responsibility unless you insure.

Regretfully, the price of paper, cost of printing and high postage have made us hesitate to furnish these supplies. However, we continue to receive requests so will furnish selected items at the lowest price we can possibly continue to handle. Membership stationery is for 'fraternal' or 'social' use only. Its use for solicitation or commercial purposes is NOT AUTHORIZED BY THE SOCIETY. Please inform us if you receive any such solicitation.



LABELS

1

2

*ALL YOU NEED IS MONEY

"IN THE WAKE"



MEMORIES

OF DAYS LONG AGO



The NIGHT BOAT

Finest and Fastest Coastwise Service

YALE AND HARVARD

The Coolest, Cleanest, Smoothest Way to Travel

To get the greatest amount of enjoyment from your vacation or business trips take a delightful sea voyage on the Yale or Harvard

BETWEEN SAN FRANCISCO, LOS ANGELES and SAN DIEGO

Wonderful meals and service—luxurious quarters—dancing in special ballroom and other pastimes—these and the cool breezes of the Pacific are yours to enjoy.

WEEKLY SAILINGS to SAN DIEGO
FOUR SAILINGS WEEKLY Between SAN FRANCISCO & LOS ANGELES

Round Trip \$22.50
 San Francisco
 Los Angeles

With Meals and Berth Included
 (Return Limit 15 Days)

Speedy, Dependable Freight Service
 All freight trucked—no hooks—no slings

Los Angeles - Honolulu Service
 First sailing, CITY OF LOS ANGELES, Saturday, Sept. 9, at noon;
 CITY OF HONOLULU, Saturday, Sept. 23. Every other Saturday thereafter.

For particulars address:
LOS ANGELES STEAMSHIP CO.

R. V. CROWDER, G. P. A.
 685 Market St., San Francisco

R. F. CULLEN, D. P. A.
 517 S. Spring St.
 Los Angeles

No recreation-spot anywhere offers as great an opportunity for healthful pleasure and rare sight-seeing as these bountiful Isles of Hawaii. It is always springtime in Aloha-land—a land of natural wonders, of poetry, legend and romance!

Even the ocean voyage itself, across the calm waters of the Pacific, is well worth the trip. Aboard the fast and commodious steamships of the Matson Line you will enjoy an invigorating trip of rest and entertainment. Fresh California and Hawaiian fruits, fish and meats are served in tempting fashion to please your whetted appetite. Matson Line cuisine and service are unsurpassed.

Our folder, "Hawaii, the Tourists' Paradise," explains the trip in detail. Send for it. Or, better yet, come in and let us plan an interesting itinerary for you.



Hawaii

The Matson Fleet:
 MATSONIA
 WILHELMINA
 ENTERPRISE
 LURLINE
 MANOA
 MAUI

Sailing every
 Wednesday from
 San Francisco
 to Hawaii

Matson Navigation Company
 SAN FRANCISCO

HMS BELGENLAND Red STAR Line

—THE WIRELESS PIONEER



PACIFIC MAIL TRANS-PACIFIC SERVICE

Five Sister Ships:
 S.S. President Cleveland
 S.S. President Wilson
 S.S. President Lincoln
 S.S. President Taft
 S.S. President Pierce



Five New Palatial
 21,167 Displacement Tons, 17½ Knot Steamers

"THE SUNSHINE BELT TO THE ORIENT"

Sailings every 14 DAYS between San Francisco, Honolulu, Japan, China and the Philippines. Unexcelled Cuisine and Service, the result of 55 years' experience in the Oriental Trade.

ANYWHERE ON THE PACIFIC



SOWP CHAPTERS

LOOKING BACK

These few last lines will complete the first issue of "SPARKS-JOURNAL-QUARTERLY." I hope you like it.

I had hoped to have this issue in the mail at an earlier date but manifest destiny decreed otherwise. Change in help and other factors had a vital bearing on a workload which is becoming increasingly heavier which I think is understandable with our fast growing membership.

This, the first issue might be called "experimental" as we didn't have experience with a tabloid to guide us. Ever try to pour 20 gallons of fluid into a 15 gallon container? Well it can't be done as you'll have it all over the place.

So I found a close parallel with content material. Regretfully, I had to 'cut' a lot of wonderful material which I will use in coming issues. Among them include articles by Ray Green (Fall River Line Story), Art Goodnow, Frank Nicholas, Bob Miller, Chuck Brelsford, Don de Neuf, Herb Scott and many many more.

QUESTIONNAIRE: Its your Society. What do you think of the 'Starter'? What are your suggestions to improve it? What changes would you like to see? Write and let me know. I'll see if we can't come up with a 'bell-ringer' . . . but I need your help to do it.

In signing off, I would like to take this opportunity of thanking staff and members for the fine support they are giving me. Also for the patience and understanding accorded. It is deeply appreciated.

William A. Breniman
Publisher.
March 25 1977



(ABERNATHY - Concluded from P-5)

Dr. Frank's declaration was read with amusement by Charles E. Appgar. By way of reply he produced a letter, written under date of 5 February of 1914, on stationery of the Atlantic Communication Company, of which Dr. Frank was then, as now, secretary and treasurer. The letter read:

"Mr. Charles E. Appgar, No. 549 Carleton Road, Westfield, NJ; Dear Sir: Your letter of the 30th ult. addressed to Mr. F.A. Seelig has come to hand and we have noted its contents with interest. In answer we beg to say that we have no objection to your receiving out Sayville press in the way you have done so far. We can, however, not allow you to publish what you receive, neither private messages or press. It would interest us to receive one or two of the phonographic records you have taken and we would be very much obliged if you would favor us with the same. Yours very truly, Atlantic Communication Company, Operating Department, H. Boehme."

On the letter, Mr. Appgar had written this memorandum:

"Monday, 9 Feb. 1914. Delivered personally to Mr. Boehme two phonographic records of Sayville (WSL) sending, dated 3 Nov. 1913, and 12 Nov. 1913 for test of results."

"I think," said Mr. Appgar, "that ought to show Dr. Frank it is his own fault if he never heard of making phonograph records of wireless messages."

--M.G. Abernathy, 1610-P

Many of the Society Chapters hold periodic reunions or meetings of members in their area for the pleasure of renewing old friendships and the fraternal pleasure they provide. You are invited to attend these 'get-to-gethers' and to participate in projects of the Chapter. All you have to do is contact the Chapter Director and he will see to it that you are provided with information about the Chapter's activities and coming meetings.

If you plan to visit another area, you may likewise contact the Chapter Director about their coming meetings, etc. You are always welcome to attend any SOWP Chapter meeting. It is usually necessary for the Chapter to furnish the restaurant with number expected, hence a reservation is usually necessary. Please include SASE when writing to Chapters.

Following is listing of Chapter Directors (D) and Secretaries (S) that you may contact for information. Scheduled meetings are indicated by (M) and date.

I GOLDEN GATE
(N. Calif, W. Nev. (D) Fred B. Mangelsdorf, 44 Temelec Circle, Sonoma, CA 95476. 707/996-1829. (M) May 14 1977, San Mateo.

III DR. LEE de FOREST
(L.A. area, So to Dana Point, E. to Las Vegas, N. to Fresno/Santa Maria) (D) Chas. D. Morrison, 2034 Del Rosa Dr. Los Angeles, CA 90041. 213/256-0842. (M) May 28 1977, Taix Res. 1911 Sunset LA.

IV STAR OF INDIA
(San Diego County, E. to Yuma, Riverside N. to LaGuna Beach etc) (D) Brandon Wentworth, 460 Oak St. La Guna Beach, CA 92651. 714/497-1437. (M) April 21 1977 aboard Star of India at San Diego mooring

V JACK BINNS (PAC. NW.)
(Pac. N.W. Ore. Washn. Idaho, Alaska, B.C (D) Earl W. Baker, Rt.1, Box 270, Olalla, WA 98359. 206/TI-12-1703. (M) Apr. 2 1977 Seattle - Dog House Restaurant, 7th St.

VI GUGIELMO MARCHESE MARCONI
(B.C. Alberta, Washn, W. Canada) (D) A.W. "Bill" Filtness #1-1093 Nicola St. Vancouver, BC. 604/683-2275 (M) NF Frequent meetings (monthly at times)

VII THOMAS A. EDISON
(Florida and S. E. USA)(D) Wm C. "Bill" Willmot - Acting. 1630 Venus St. Merritt Island, FL 32952. 305/452-2090. (M) Mar. 12 1977, Holiday Inn, Merritt Isl.

VIII R.E. ARMSTRONG
(Texas, Gulf Coast) (D) G.D."Jerry" Sears, 5634 Eskridge St. Houston, TX 7702: 77023, (M) Two or three annual.

IX ARIZONA - Southwest
(Ariz. NM. So. Nev.) (D) Joseph A. Falbo 3875 N. Country Club #205, Tucson, AZ 85716 602/793-7482. (May ? 1977)

X CAPITAL AREA
(Within several hundred miles of Washn. DC) 200 East Wayne Ave. Silver Spring, MD. 20901. 301/585-3708. (M) Late Apr. or May; not yet scheduled.

XI ELMO N. PICKERILL
(Within Several hundred miles of NYC) (D) H.A."Bud" Fischer, 14 Mohawk Trail, Westfield, NJ 07090; 201/232-4974. (M) Spring probably - not yet scheduled.

XV CANADIAN-GREAT LAKES (NORTH SHORE)
(Central and Eastern Canada) U.S. Members invited. (D) K.J."Ken" Taylor, 3285 Queen Frederica Dr. Messessauga, Ont. L4Y 2Z9; 416/277-4130. Inquire.

XVI GONZALES
(Vancouver Island, B. C.) (D) Leonard A. "Len" Polack, 3111 Wood Park Dr. Victoria BC V8S 5E9; 604/598-2157. (Meets several times yearly - inquire)

NORTHWESTERN EUROPE
(D) Cornelis "Cor" Glerum, Nieuwe Kerkple Kerkplein 29, Schore 36 (Zeeland) Netherlands 3616. (Contact for meeting dates)

ENGLAND & BRITISH ISLS.
(D) John A. Edwards, 81 Hunter Ave., 81 Hunter Ave. (Near Brentwood) Essex, Eng. CM15 8PF. Phone: Brentwood 210180. (Inquire about meeting dates)

AUSTRALIA - NEW ZEALAND
(D) Frank A. Carey, 142 Seville St. Fairfield NSW, 2165 Australia. 726-1038 (Contact for meeting dates)

(*) **PORTLAND OREGON AREA MEETINGS**
(Frequent 'get-to-gethers' - Call John A. Peel, 4516 SE Adams St. Milwaukie, OR 97222. Phone: 503/ 654-2712. (W7LT)

◆◆◆◆ VOICE OF THE "PROFESSIONAL" RADIO OFFICER ◆◆◆◆

SOCIETY OF WIRELESS PIONEERS, INC.
P. O. Box 530
SANTA ROSA, CALIFORNIA 95402

To:

Newsletters from the Society of Wireless Pioneers, founded 1968
~ Dedicated to the History of Seagoing Wireless Operators ~

Special thanks to the following for these documents:
Key [SK = Silent Key, SGP = Spark Gap Pioneers, P = Pioneers,
V = Veteran, M = Member, Sparks = Worked at Sea]

(SK) Ed Raser, W2ZI, Radio Pioneer, Sparks, SOWP #35-SGP
(SK) Bill Gould, K2NP, Radio Pioneer, Sparks, SOWP #565-P
(SK) Matty Camillo, W2WB, Sparks, SOWP #750-SGP
(SK) Dare Robinson, WB2EVA, Sparks, SOWP #2284-SGP
(SK) Ray Brooks, K2LTX, Sparks, SOWP #1387-P
Olive Jesse Roekner, VA6ERA, Sparks, SOWP #2891-V
Spud Roscoe, VE1BC, Sparks, SOWP #2301-M
David J. Ring, Jr., N1EA, Sparks, SOWP #3709-M
Steven Rosenfeld, Infoage Librarian, Tech at WOO

Digital media © John Dilks, K2TQN, 2012